



FREE SAMPLES — FAST!

We'll be happy to provide you with free samples for your next project. Our samples usually ship the same day so you can evaluate our products for your next design. It's as simple as calling your sales rep today or using our convenient web sample request.

QUICK QUOTES

Our customer-driven sales team will provide quotes quickly, usually within hours of being contacted. Our aim is to provide you with pricing information fast, so you can place your order and receive it on time.

CUSTOM CONNECTORS

Whether your next design requires a unique connector or just something simple like a molded-in key, Sullins is ready to provide you with a solution to your particular design challenge. We can design a custom connector for your project with little or no additional cost. Call our sales team today and experience the Sullins Advantage. And, since we manufacture most of our connectors in California, we can usually have a custom product ready in just days.

FREE CONSULTATION

Our engineering and technical teams are experts in edgecard connector and header design. We can help with engineering consultation for a variety of connector applications and a broad range of products. Call us and utilize our technical resources on your next design.

QUICK TURNAROUND

Your project is important to us, so fast delivery is our primary goal. Our average lead times are less than five days, and many orders ship the same day. We strive to provide you with the best quality products in record time. Great products, delivered fast! Our goal is to keep your project on track.

EASY PRODUCT SEARCH

Quickly find a product by part number by using our index on pages 143-148

CONTACT US

E-mail

info@sullinscorp.com

Online

www.sullinscorp.com

USA Phone

toll-free 888.774.3100
international 760.744.0125

USA Fax

760.744.6081

USA Mail

801 E. Mission Road
San Marcos, CA 92069
USA

Taiwan Phone

886-2-2738-7377

Taiwan Fax

886-2-2738-3586

Taiwan Mail

8F-1, No 268 Fuxing
S Rd, Sec 2, Taipei,
Taiwan



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.156" [3.96 mm] Contact Centers

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A BRAND NEW SULLINS

2008 is an exciting year for Sullins as we strive to become a more customer-driven and competitive company offering a wider spectrum of products and services than ever before. To achieve this goal, we are rebranding our company from the inside out. In the coming months, you'll be experiencing some new and revitalized results of our rebranding efforts in your interactions with Sullins. Below are just a few highlights we'd like to share with you:

New Logo

Sullins' fresh new logo symbolizes our transformation into a more modern and streamlined company in order to serve customers like you more effectively. Our new tagline, "Connector Solutions" brings more focus and clarity in communicating our business to all audiences.

New Catalog

Our 2008 catalog is the largest ever, combining products from Sullins and Micro Plastics into one convenient reference. We hope our newly designed, comprehensive catalog is easy to use and provides all the information you need for your connector solutions.

New Web Site — Coming Summer 2008

Sullins is developing a brand new Web site to communicate and conduct business more effectively with online customers. The new, invigorated design will help online customers navigate the site easily, learn about new products better, find products quickly, understand our connector design process more thoroughly, purchase standard connectors from our online store, and much, much more!

GO THE DISTANCE

At Sullins, we go the distance to meet our customers' needs. But don't take our word for it. Here are what some customers have to say about our products and services.

*"You are awesome. I can always count on you to have the quotes in an hour or two.
You are timely and efficient, a pleasure to do business with."
-Jackie Feight, Heilind Electronics*

*"Sullins' response turnaround, accuracy and attention to detail is beyond impressive.
Simply amazing!"
-Paul Alexandrescu, Product Cost Engineering*

*"Man that was fast! Like how you work, girl. THANKS!!!!!!"
-Johnny Q. Guerrero, Ital Electronics*

*"You're the best."
-Erik Wisesa, Bisco Industries*

WE VALUE YOUR FEEDBACK

Your input is important to us as we continue to grow and become a better company. Please feel free to share any notable feedback or suggestions with us by e-mailing feedback@sullinscorp.com.



GENERAL SPECIFICATIONS

RoHS COMPLIANT

RoHS
COMPLIANT

All parts are currently manufactured with recommended materials to meet RoHS standards. All contacts have 50u" of nickel underplating, and a large selection of plating options: Pure tin matte, overall gold, or selective gold plating. For complete part number information or operating/processing temperature parameters, visit the RoHS section of our website, or refer to page 5 of this catalog.

MATERIALS

Insulator

- PBT, Valox*, Thermoplastic Polyester
- PPS, Ryton*, Polyphenylene Sulfide
- PEEK, Polyetheretherketone
- PA9T, High Temperature Polyamide
- Other materials available. Consult Factory

Contacts

Phosphor Bronze (Standard), Beryllium Copper, Beryllium Nickel, Spinodal**, Brass

Plating

Gold and/or Tin over .000050" Nickel Underplate, Lead Free

UL/CUL File Number: E64287

Cage Code: 54453

MECHANICAL

Board Insertion Force 16 oz Maximum per contact pair using .062"[1.58mm] thick steel test blade

Board Withdrawal Force 1 oz Minimum per contact pair using .062"[1.58mm] thick steel test blade

Special Insertion/Withdrawal forces available upon request

ELECTRICAL

Insulation Resistance: 5,000 Mega Ohm

Dielectric Withstanding Voltage

Contact Centers:	.039"[1mm]	.050"[1.27mm]	.100"[2.54mm]	.125"[3.18mm]	.150"[3.81mm]	.156"[3.96mm]
Voltage:	125 VDC	250 VDC	600 VDC	800 VDC	1500 VDC	1800 VDC
	225 VAC	300 VAC	750 VAC	750 VAC	900 VAC	950 VAC

Current Rating: 1 to 5 amp per contact

Contact Resistance: 30 milli ohm maximum at rated current

ENVIRONMENTAL

Solvent resistance: Perchloroethylene, Freon 113, Freon 11, Trichloroethylene

Operating Temperature:	PBT	-65° to +130°C	Phosphor Bronze	-65° to +125°C
	PPS	-65° to +200/220°C***	Beryllium Copper	-65° to +150°C
	PEEK	-65° to +250°C***	Spinodal**	-65° to +200°C
	PA9T	-65° to +150°C	Beryllium Nickel***	-65° to +300°C
(Continuous temperatures, higher for short duration. Contact Factory for details.)				

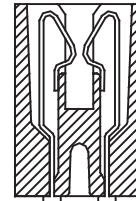
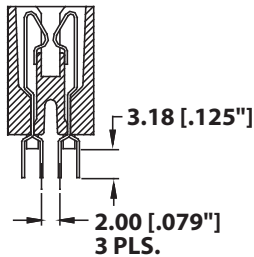
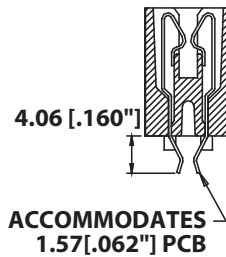
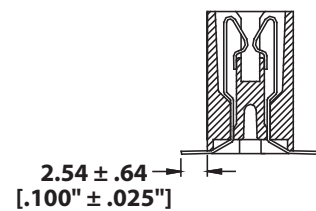
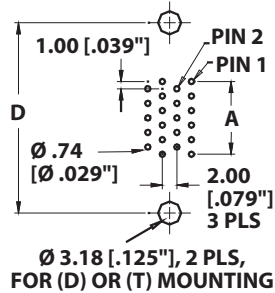
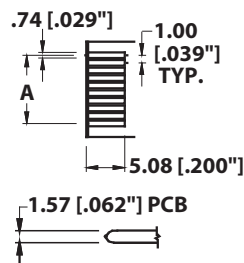
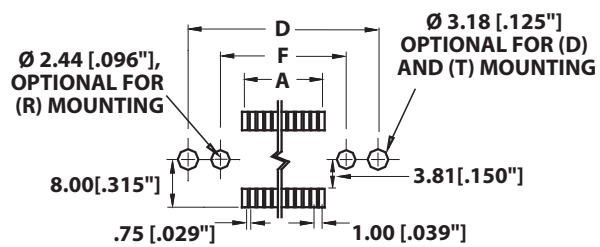
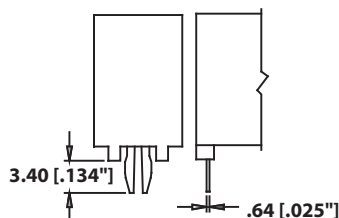
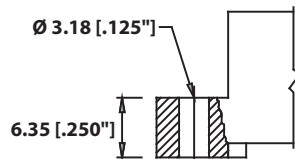
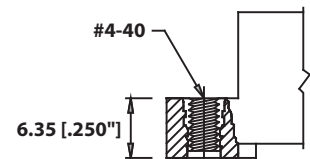
* Or equivalent.

** Consult factory for special soldering guidelines.

*** Consult factory.

**1.00 mm [.039"] Contact Centers, 15.49 mm [.610"] Insulator Height**
Dip Solder/Card Extender/SMT**SPECIFICATIONS**

- Accommodates 1.57 mm $\pm$.20 [.062" $\pm$.008"] PC board
- PPS or PA9T insulator
- Molded-in key available
- 1 amp current rating per contact
- Highly reliable high cycle hairpin bellow contacts
- 150 grams normal force minimum

READOUT**DUAL (D)****TERMINATION TYPE****STAGGERED DIP SOLDER (HH)****CARD EXTENDER (HR)****SURFACE MOUNT (HF)****PCB LAYOUT****CONNECTOR SIDE (HH)****SOLDER END (HR)****CONNECTOR SIDE (HF)****MOUNTING STYLE****BOARD LOCK (R)**
(with no mounting ears)**NO MOUNTING EARS (N)****FLUSH MOUNTING (D)****THREADED INSERT (T)**

1.00 mm [.039"] Contact Centers, 15.49 mm [.610"] Insulator Height Dip Solder/Card Extender/SMT



PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface

B = .000010" Gold
C = .000030" Gold

Termination

.000100" Pure Tin, Matte
.000100" Pure Tin, Matte

CONTACT CENTERS

E = 1.00mm [.039"]

G B E 50 D HH D - Sxxx

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

MOUNTING STYLE (Opposite Page)

D = Flush Mounting
N = No Mounting
R = Metal Board Lock
T = Flush Mounting, #4-40 Threaded Insert

TERMINATION TYPE (Opposite Page)

HH = Staggered Dip Solder
HR = Card Extender
HF = Surface Mount

READOUT (Opposite Page)

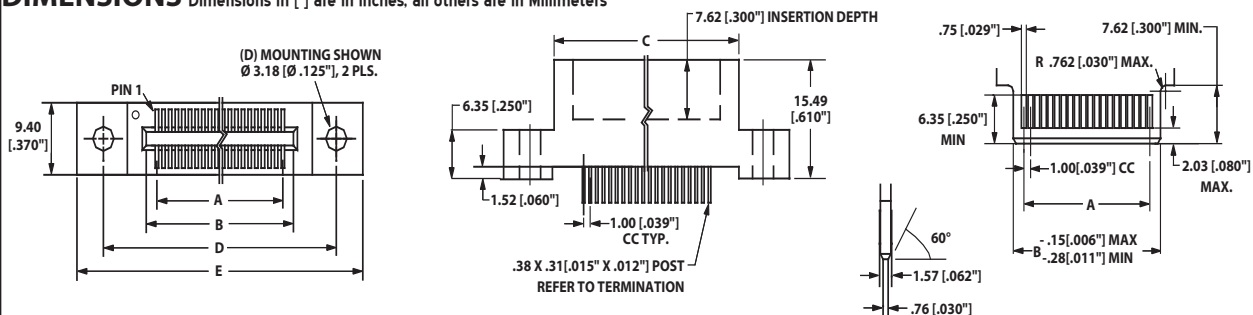
D = Dual

NUMBER OF CONTACT POSITIONS

See Chart Below

DIMENSIONS

Dimensions in [] are in Inches, all others are in Millimeters

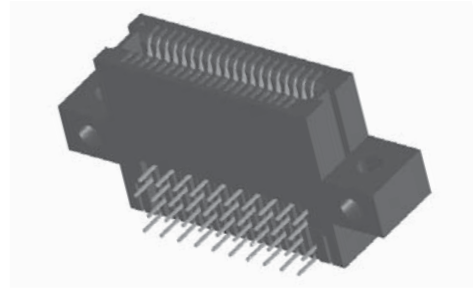
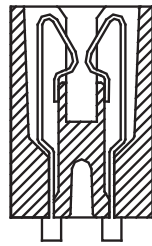
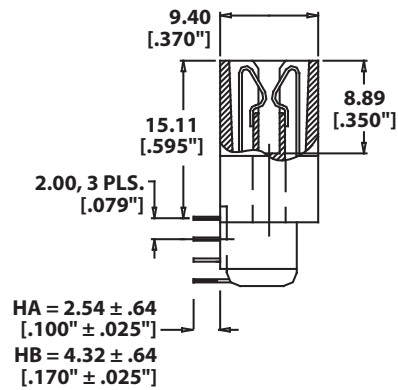
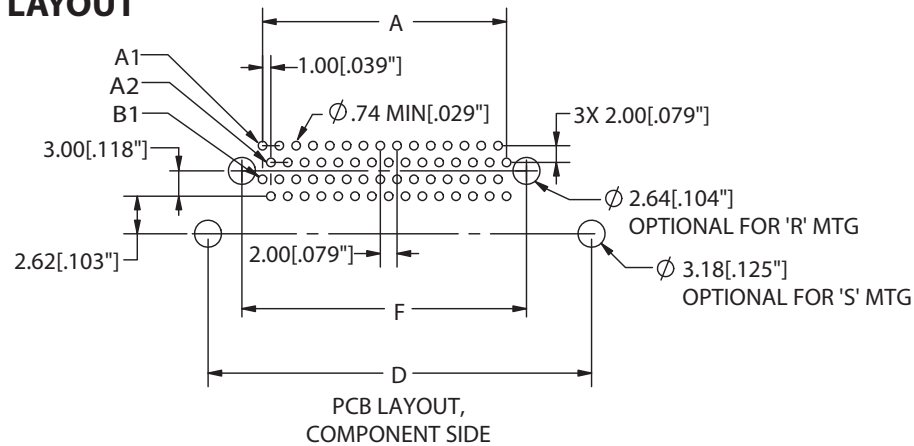
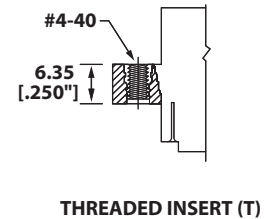
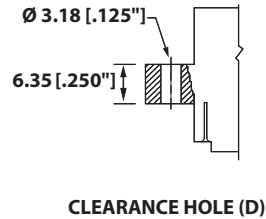
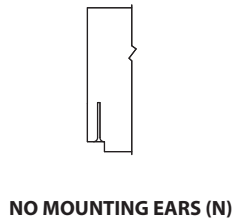
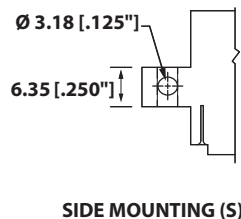
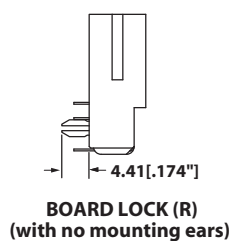


POSITIONS/ CONTACTS	MILLIMETERS						[INCHES]					
	A ±.13	B ±.13	C ±.38	D ±.25	E ±.51	F ±.25	A ±.005	B ±.005	C ±.015	D ±.010	E ±.020	F ±.010
02/04*	1.00	4.32	9.89	17.15	25.13	4.66	0.039	0.170	0.389	0.675	0.989	0.183
03/06*	2.00	5.32	10.89	18.15	26.13	5.66	0.079	0.210	0.429	0.715	1.029	0.223
04/08*	3.00	6.32	11.89	19.15	27.13	6.66	0.118	0.249	0.468	0.754	1.068	0.262
05/10	4.00	7.32	12.89	20.15	28.13	7.66	0.157	0.288	0.507	0.793	1.107	0.301
06/12*	5.00	8.32	13.89	21.15	29.13	8.66	0.197	0.328	0.547	0.833	1.147	0.341
07/14*	6.00	9.32	14.89	22.15	30.13	9.66	0.236	0.367	0.586	0.872	1.186	0.380
08/16*	7.00	10.32	15.89	23.15	31.13	10.66	0.276	0.407	0.626	0.912	1.226	0.420
09/18*	8.00	11.32	16.89	24.15	32.13	11.66	0.315	0.446	0.665	0.951	1.265	0.459
10/20	9.00	12.32	17.89	25.15	33.13	12.66	0.354	0.485	0.704	0.990	1.304	0.498
11/22*	10.00	13.32	18.89	26.15	34.13	13.66	0.394	0.525	0.744	1.030	1.344	0.538
12/24*	11.00	14.32	19.89	27.15	35.13	14.66	0.433	0.564	0.783	1.069	1.383	0.577
13/26*	12.00	15.32	20.89	28.15	36.13	15.66	0.472	0.603	0.822	1.108	1.422	0.616
14/28*	13.00	16.32	21.89	29.15	37.13	16.66	0.512	0.643	0.862	1.148	1.462	0.656
15/30	14.00	17.32	22.89	30.15	38.13	17.66	0.551	0.682	0.901	1.187	1.501	0.695
16/32*	15.00	18.32	23.89	31.15	39.13	18.66	0.591	0.722	0.941	1.227	1.541	0.735
17/34*	16.00	19.32	24.89	32.15	40.13	19.66	0.630	0.761	0.980	1.266	1.580	0.774
18/36*	17.00	20.32	25.89	33.15	41.13	20.66	0.669	0.800	1.019	1.305	1.619	0.813
19/38*	18.00	21.32	26.89	34.15	42.13	21.66	0.709	0.840	1.059	1.345	1.659	0.853
20/40	19.00	22.32	27.89	35.15	43.13	22.66	0.748	0.879	1.098	1.384	1.698	0.892
21/42*	20.00	23.32	28.89	36.15	44.13	23.66	0.787	0.918	1.137	1.423	1.737	0.931
22/44*	21.00	24.32	29.89	37.15	45.13	24.66	0.827	0.958	1.177	1.463	1.777	0.971
23/46*	22.00	25.32	30.89	38.15	46.13	25.66	0.866	0.997	1.216	1.502	1.816	1.010
24/48*	23.00	26.32	31.89	39.15	47.13	26.66	0.906	1.037	1.256	1.542	1.856	1.050
25/50	24.00	27.32	32.89	40.15	48.13	27.66	0.945	1.076	1.295	1.581	1.895	1.089
26/52*	25.00	28.32	33.89	41.15	49.13	28.66	0.984	1.115	1.334	1.620	1.934	1.128
27/54*	26.00	29.32	34.89	42.15	50.13	29.66	1.024	1.155	1.374	1.660	1.974	1.168
28/56*	27.00	30.32	35.89	43.15	51.13	30.66	1.063	1.194	1.413	1.699	2.013	1.207
29/58*	28.00	31.32	36.89	44.15	52.13	31.66	1.102	1.233	1.452	1.738	2.052	1.246
30/60	29.00	32.32	37.89	45.15	53.13	32.66	1.142	1.273	1.492	1.778	2.092	1.286
31/62*	30.00	33.32	38.89	46.15	54.13	33.66	1.181	1.312	1.531	1.817	2.131	1.325
32/64*	31.00	34.32	39.89	47.15	55.13	34.66	1.220	1.351	1.570	1.856	2.170	1.364
33/66*	32.00	35.32	40.89	48.15	56.13	35.66	1.260	1.391	1.610	1.896	2.210	1.404
34/68*	33.00	36.32	41.89	49.15	57.13	36.66	1.299	1.430	1.649	1.935	2.249	1.443
35/70	34.00	37.32	42.89	50.15	58.13	37.66	1.339	1.470	1.689	1.975	2.289	1.483
36/72*	35.00	38.32	43.89	51.15	59.13	38.66	1.378	1.509	1.728	2.014	2.328	1.522
37/74*	36.00	39.32	44.89	52.15	60.13	39.66	1.417	1.548	1.767	2.053	2.367	1.561
38/76*	37.00	40.32	45.89	53.15	61.13	40.66	1.457	1.588	1.807	2.093	2.407	1.601
39/78*	38.00	41.32	46.89	54.15	62.13	41.66	1.496	1.627	1.846	2.132	2.446	1.640
40/80	39.00	42.32	47.89	55.15	63.13	42.66	1.535	1.666	1.885	2.171	2.485	1.679
41/82*	40.00	43.32	48.89	56.15	64.13	43.66	1.575	1.706	1.925	2.211	2.525	1.719
42/84*	41.00	44.32	49.89	57.15	65.13	44.66	1.614	1.745	1.964	2.250	2.564	1.758
43/86*	42.00	45.32	50.89	58.15	66.13	45.66	1.654	1.785	2.004	2.290	2.604	1.798
44/88*	43.00	46.32	51.89	59.15	67.13	46.66	1.693	1.824	2.043	2.329	2.643	1.837
45/90	44.00	47.32	52.89	60.15	68.13	47.66	1.732	1.863	2.082	2.368	2.682	1.876
46/92*	45.00	48.32	53.89	61.15	69.13	48.66	1.772	1.903	2.122	2.408	2.722	1.916
47/94*	46.00	49.32	54.89	62.15	70.13	49.66	1.811	1.942	2.161	2.447	2.761	1.955
48/96*	47.00	50.32	55.89	63.15	71.13	50.66	1.850	1.981	2.200	2.486	2.800	1.994
49/98*	48.00	51.32	56.89	64.15	72.13	51.66	1.890	2.021	2.240	2.526	2.840	2.034
50/100	49.00	52.32	57.89	65.15	73.13	52.66	1.929	2.060	2.279	2.565	2.879	2.073

* Consult Factory For Availability

**1.00 mm [.039"] Contact Centers, 21.84 mm [.860"] Insulator Height
Right Angle****SPECIFICATIONS**

- Accommodates 1.57 mm $\pm$.20 [.062" $\pm$.008"] PC board
- PA9T or PPS insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

**READOUT****DUAL (D)****TERMINATION TYPE****PCB LAYOUT****MOUNTING STYLE**



1.00 mm [.039"] Contact Centers, 21.84 mm [.860"] Insulator Height Right Angle

PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

- E = PBT/Phosphor Bronze
- H = PBT/Beryllium Copper
- G = PA9T/Phosphor Bronze
- R = PPS/Phosphor Bronze
- J = PA9T/Beryllium Copper
- A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte

CONTACT CENTERS
E = 1mm [.039"]

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

MOUNTING STYLE (Opposite Page)

- D = Flush Mounting
- N = No Mounting
- R = Metal Board Lock
- S = Side Mounting
- T = Flush Mounting with Threaded Insert

TERMINATION TYPE (Opposite Page)

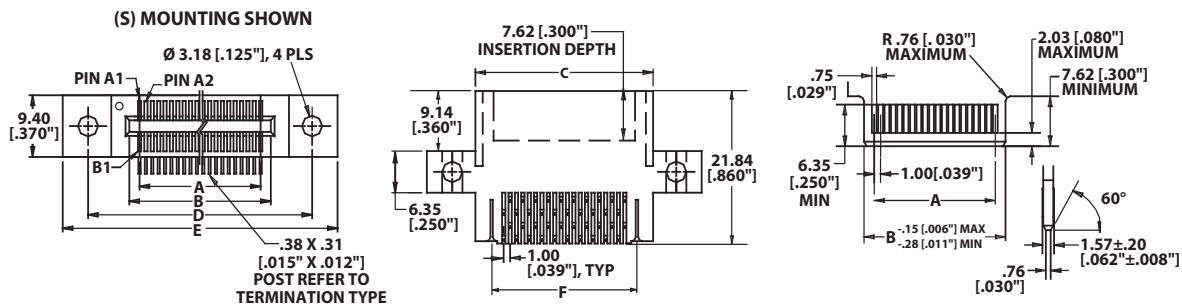
- HA = .100" [2.54] Tail Length
- HB = .170" [4.32] Tail Length

READOUT (Opposite Page)
D = Dual

NUMBER OF CONTACT POSITIONS
See Chart Below

DIMENSIONS

Dimensions in [] are in Inches, all others are in Millimeters



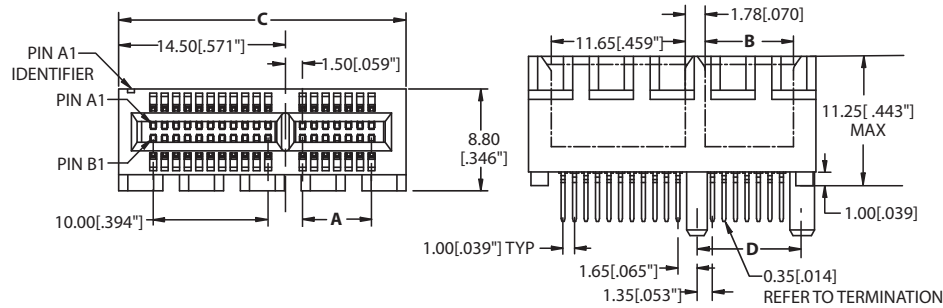
POSITIONS/ CONTACTS	MILLIMETERS						[INCHES]					
	A ±.13	B ±.13	C ±.38	D ±.25	E ±.51	F ±.25	A ±.005	B ±.005	C ±.015	D ±.010	E ±.020	F ±.010
02/04*	1.00	4.32	9.89	17.15	25.13	5.25	0.039	0.170	0.389	0.675	0.989	0.207
03/06*	2.00	5.32	10.89	18.15	26.13	6.25	0.079	0.210	0.429	0.715	1.029	0.246
04/08*	3.00	6.32	11.89	19.15	27.13	7.25	0.118	0.249	0.468	0.754	1.068	0.285
05/10	4.00	7.32	12.89	20.15	28.13	8.25	0.157	0.288	0.507	0.793	1.107	0.325
06/12*	5.00	8.32	13.89	21.15	29.13	9.25	0.197	0.328	0.547	0.833	1.147	0.364
07/14*	6.00	9.32	14.89	22.15	30.13	10.25	0.236	0.367	0.586	0.872	1.186	0.404
08/16	7.00	10.32	15.89	23.15	31.13	11.25	0.276	0.407	0.626	0.912	1.226	0.443
09/18*	8.00	11.32	16.89	24.15	32.13	12.25	0.315	0.446	0.665	0.951	1.265	0.482
10/20	9.00	12.32	17.89	25.15	33.13	13.25	0.354	0.485	0.704	0.990	1.304	0.522
11/22*	10.00	13.32	18.89	26.15	34.13	14.25	0.394	0.525	0.744	1.030	1.344	0.561
12/24*	11.00	14.32	19.89	27.15	35.13	15.25	0.433	0.564	0.783	1.069	1.383	0.600
13/26*	12.00	15.32	20.89	28.15	36.13	16.25	0.472	0.603	0.822	1.108	1.422	0.640
14/28*	13.00	16.32	21.89	29.15	37.13	17.25	0.512	0.643	0.862	1.148	1.462	0.679
15/30	14.00	17.32	22.89	30.15	38.13	18.25	0.551	0.682	0.901	1.187	1.501	0.719
16/32*	15.00	18.32	23.89	31.15	39.13	19.25	0.591	0.722	0.941	1.227	1.541	0.758
17/34*	16.00	19.32	24.89	32.15	40.13	20.25	0.630	0.761	0.980	1.266	1.580	0.797
18/36*	17.00	20.32	25.89	33.15	41.13	21.25	0.669	0.800	1.019	1.305	1.619	0.837
19/38*	18.00	21.32	26.89	34.15	42.13	22.25	0.709	0.840	1.059	1.345	1.659	0.876
20/40	19.00	22.32	27.89	35.15	43.13	23.25	0.748	0.879	1.098	1.384	1.698	0.915
21/42*	20.00	23.32	28.89	36.15	44.13	24.25	0.787	0.918	1.137	1.423	1.737	0.955
22/44*	21.00	24.32	29.89	37.15	45.13	25.25	0.827	0.958	1.177	1.463	1.777	0.994
23/46*	22.00	25.32	30.89	38.15	46.13	26.25	0.866	0.997	1.216	1.502	1.816	1.033
24/48*	23.00	26.32	31.89	39.15	47.13	27.25	0.906	1.037	1.256	1.542	1.856	1.073
25/50	24.00	27.32	32.89	40.15	48.13	28.25	0.945	1.076	1.295	1.581	1.895	1.112
26/52*	25.00	28.32	33.89	41.15	49.13	29.25	0.984	1.115	1.334	1.620	1.934	1.152
27/54*	26.00	29.32	34.89	42.15	50.13	30.25	1.024	1.155	1.374	1.660	1.974	1.191
28/56*	27.00	30.32	35.89	43.15	51.13	31.25	1.063	1.194	1.413	1.699	2.013	1.230
29/58*	28.00	31.32	36.89	44.15	52.13	32.25	1.102	1.233	1.452	1.738	2.052	1.270
30/60	29.00	32.32	37.89	45.15	53.13	33.25	1.142	1.273	1.492	1.778	2.092	1.309
31/62*	30.00	33.32	38.89	46.15	54.13	34.25	1.181	1.312	1.531	1.817	2.131	1.348
32/64*	31.00	34.32	39.89	47.15	55.13	35.25	1.220	1.351	1.570	1.856	2.170	1.388
33/66	32.00	35.32	40.89	48.15	56.13	36.25	1.260	1.391	1.610	1.896	2.210	1.427
34/68*	33.00	36.32	41.89	49.15	57.13	37.25	1.299	1.430	1.649	1.935	2.249	1.467
35/70	34.00	37.32	42.89	50.15	58.13	38.25	1.339	1.470	1.689	1.975	2.289	1.506
36/72*	35.00	38.32	43.89	51.15	59.13	39.25	1.378	1.509	1.728	2.014	2.328	1.545
37/74*	36.00	39.32	44.89	52.15	60.13	40.25	1.417	1.548	1.767	2.053	2.367	1.585
38/76*	37.00	40.32	45.89	53.15	61.13	41.25	1.457	1.588	1.807	2.093	2.407	1.624
39/78*	38.00	41.32	46.89	54.15	62.13	42.25	1.496	1.627	1.846	2.132	2.446	1.663
40/80	39.00	42.32	47.89	55.15	63.13	43.25	1.535	1.666	1.885	2.171	2.485	1.703
41/82*	40.00	43.32	48.89	56.15	64.13	44.25	1.575	1.706	1.925	2.211	2.525	1.742
42/84*	41.00	44.32	49.89	57.15	65.13	45.25	1.614	1.745	1.964	2.250	2.564	1.781
43/86*	42.00	45.32	50.89	58.15	66.13	46.25	1.654	1.785	2.004	2.290	2.604	1.821
44/88*	43.00	46.32	51.89	59.15	67.13	47.25	1.693	1.824	2.043	2.329	2.643	1.860
45/90	44.00	47.32	52.89	60.15	68.13	48.25	1.732	1.863	2.082	2.368	2.682	1.900
46/92*	45.00	48.32	53.89	61.15	69.13	49.25	1.772	1.903	2.122	2.408	2.722	1.939
47/94*	46.00	49.32	54.89	62.15	70.13	50.25	1.811	1.942	2.161	2.447	2.761	1.978
48/96*	47.00	50.32	55.89	63.15	71.13	51.25	1.850	1.981	2.200	2.486	2.800	2.018
49/98*	48.00	51.32	56.89	64.15	72.13	52.25	1.890	2.021	2.240	2.526	2.840	2.057
50/100	49.00	52.32	57.89	65.15	73.13	53.25	1.929	2.060	2.279	2.565	2.879	2.096

* Consult Factory For Availability



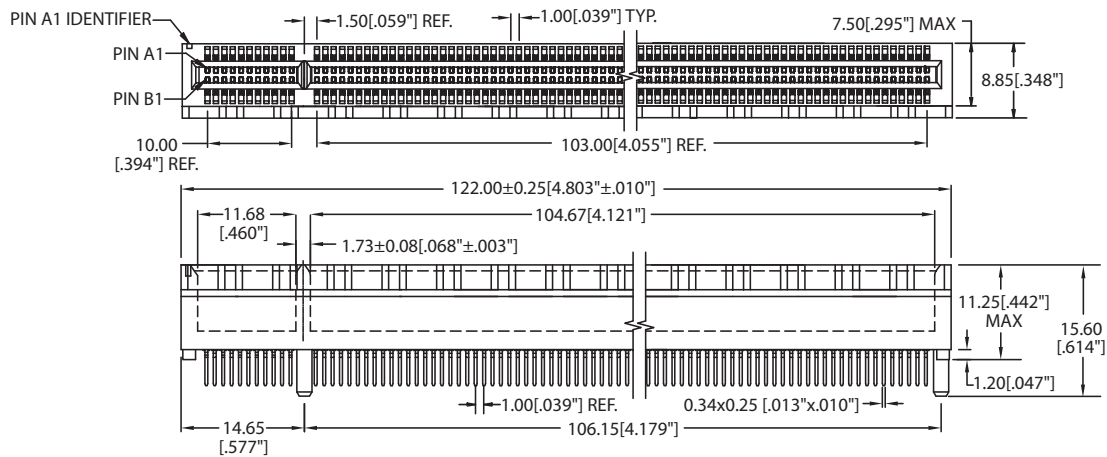
1.00 mm [.039"] Contact Centers, PCI Express, Dip Solder

DIMENSIONS Dimensions in [] are in Inches, all others are in Millimeters

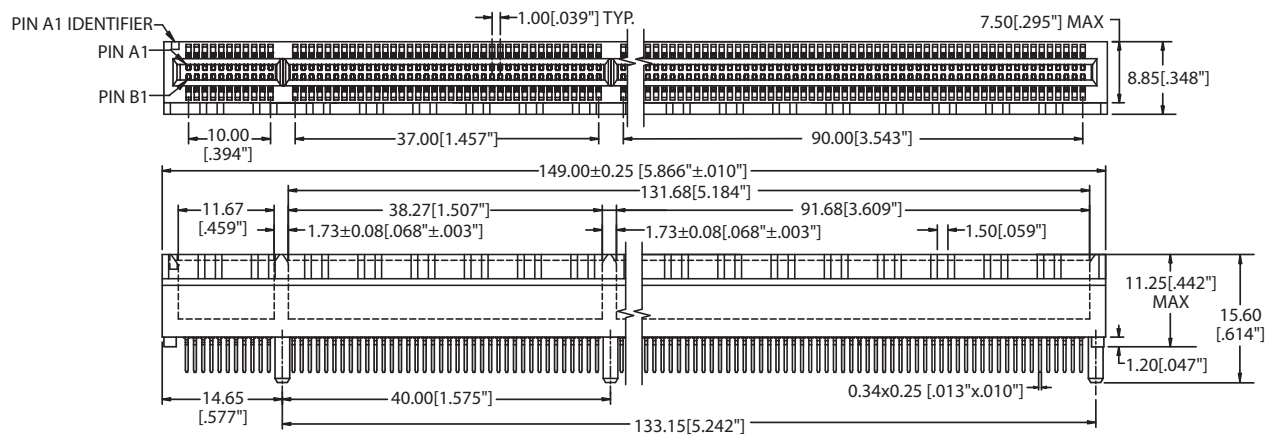


18/36, 32/64, 49/98, 82/164 POSITION, STAGGERED DIP SOLDER (HH)

POSITIONS/ CONTACTS	MILLIMETERS				[INCHES]			
	A ± 0.10	B ± 0.15	C ± 0.23	D ± 0.20	A ± 0.004"	B ± 0.006"	C ± 0.009"	D ± 0.008"
18/36	6.00	7.65	25.00	9.15	0.236	0.301	0.984	0.360
32/64	20.00	21.65	39.00	23.15	0.787	0.852	1.535	0.911
49/98	37.00	38.65	56.00	40.15	1.457	1.522	2.205	1.581
82/164	70.00	71.65	89.00	73.15	2.756	2.821	3.504	2.880



115/230 POSITION, STAGGERED DIP SOLDER (HH)

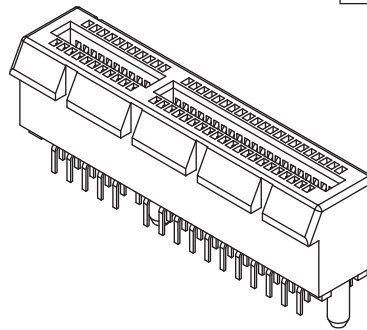


140/280 POSITION, STAGGERED DIP SOLDER (HH)



PART NUMBER CODING

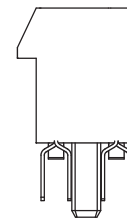
										N	B	E	18	D	HH	N	-T9	2	1		
MATERIALS (INSULATOR/CONTACT)																				COLOR	
N = Nylon46/Phosphor Bronze																				1 = Black Other Options Available	
CONTACT FINISH - RoHS Compliant																				TAIL LENGTH	
All platings are Lead Free and have .000050" Nickel underplate																				1 = 2.30mm [.091"] (140 Position, not available)	
Contact Surface										Termination										2 = 2.54mm [.100"] (140 position, not available)	
B = .000010" Gold										.000100" Pure Tin, Matte										3 = 3.10mm [.122"] (140 position, 3.00mm [.118"])	
C = .000030" Gold										.000100" Pure Tin, Matte											
W = Gold Flash										.000100" Pure Tin, Matte											
CONTACT CENTERS																				MOUNTING STYLE	
E = 1mm [.039"]																				N = No Mounting	
NUMBER OF CONTACT POSITIONS																				TERMINATION TYPE	
18, 32, 49, 82, 115, 140																				HH = Staggered Dip Solder	
																				READOUT	
																				D = Dual	



SPECIFICATIONS

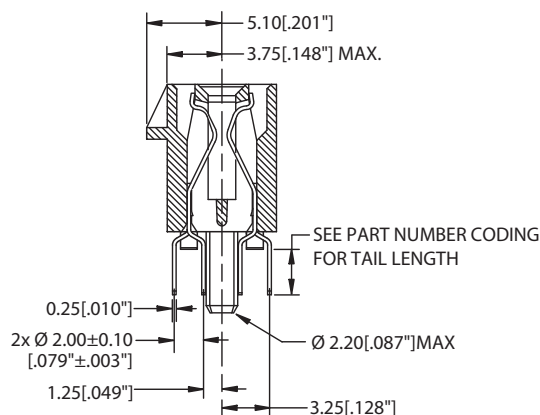
- All PCI Express parts meet the latest PCI Express specifications
- Supports 2.5 Gb/s Data Transfer Rate (per pair data bandwidth)
- Accommodates 1.57mm ± 0.20mm [.062" ± .008"] PC board
- Nylon46 insulator
- 1.1 amp current rating per contact

READOUT



DUAL (D)

TERMINATION TYPE



Staggered Dip Solder (HH)

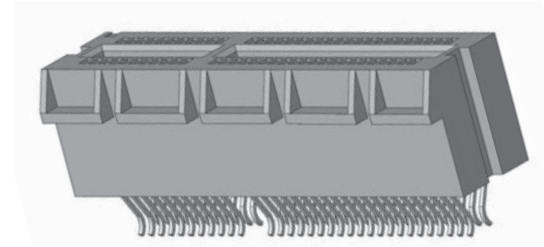
MOUNTING STYLE



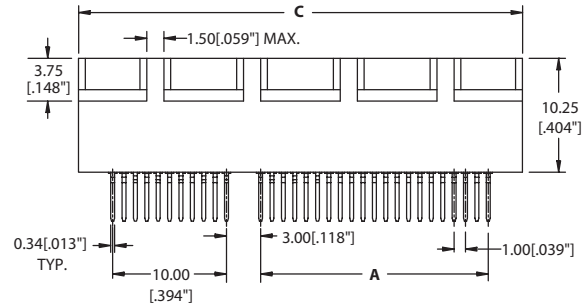
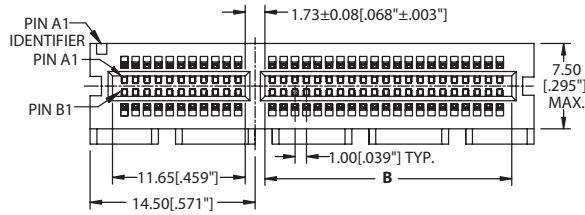
No Mounting Ears (N)



1.00 mm [.039"] Contact Centers, PCI Express, Card Extender for Surface Mount

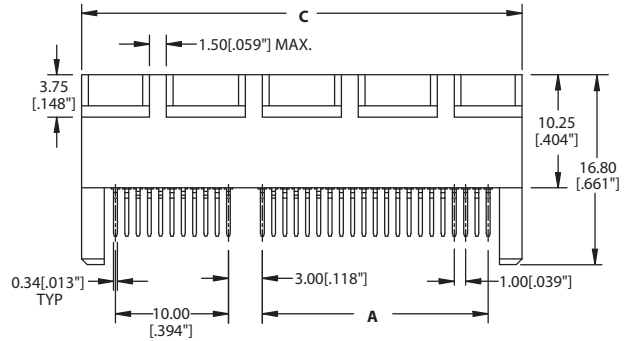
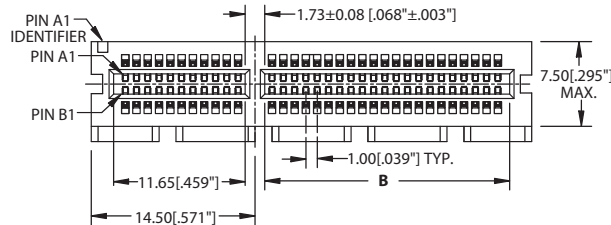


DIMENSIONS Dimensions in [] are in Inches, all others are in Millimeters



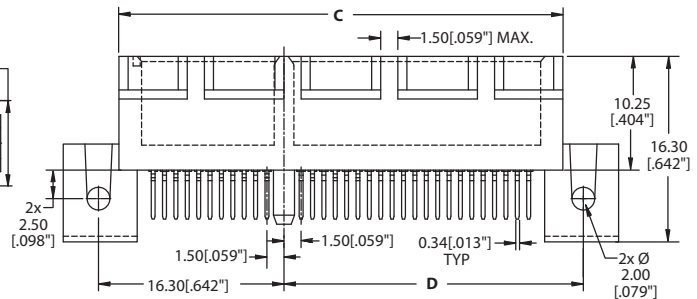
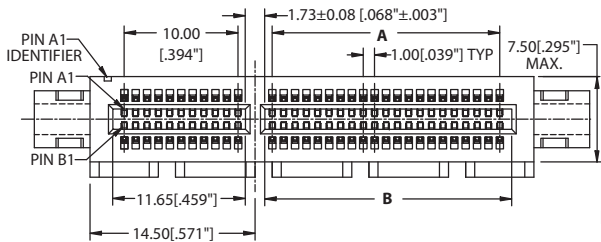
STRADDLE MOUNT

Example Part Number: NBE18DHRN-T941



STRADDLE MOUNT with PEGS

Example Part Number: NBE18DHRN-T9410



STRADDLE MOUNT with CLIPS

Example Part Number: NBE18DHRQ-T941

POSITIONS/ CONTACTS	MILLIMETERS				[INCHES]			
	A ± 0.15	B ± 0.15	C ± 0.15	D ± 0.15	A ± 0.006"	B ± 0.006"	C ± 0.006"	D ± 0.006"
18/36	6.00	7.65	25.00	12.30	0.236	0.301	0.984	0.484
32/64	20.00	21.65	39.00	26.30	0.787	0.852	1.535	1.035
49/98	37.00	38.65	56.00	43.30	1.457	1.522	2.205	1.705
82/164	70.00	71.65	89.00	76.30	2.756	2.821	3.504	3.004

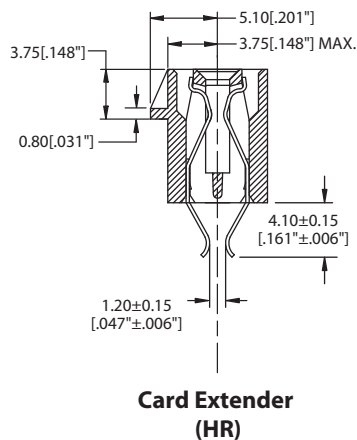


**1.00 mm [.039"] Contact Centers, PCI Express,
Card Extender for Surface Mount**

PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)	N	B	E	18	D	HR	N	-T9	4	1	0	MODIFICATION CODE
N = Nylon 46/Phosphor Bronze												OMIT FOR STANDARD
CONTACT FINISH - RoHS Compliant												0 = Pegs
All platings are Lead Free and have .000050" Nickel underplate												Available in 'N' Mounting Only
CONTACT SURFACE												COLOR
B = .000010" Gold												1 = Black
C = .000030" Gold												Other Options Available
W = Gold Flash												TAIL LENGTH
												4 = 4.10mm [.161"]
CONTACT CENTERS												MOUNTING STYLE
E = 1mm [.039"]												N = No Mounting
NUMBER OF CONTACT POSITIONS												Q = Straddle Mount with Clips
18, 32, 49, 82												(Q Not Available with T9410 Modification)
READOUT												TERMINATION TYPE
D = Dual												HR = Card Extender for Straddle Mount

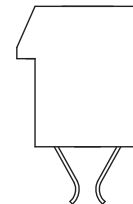
TERMINATION TYPE



SPECIFICATIONS

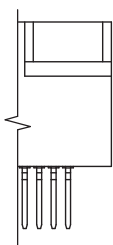
- All PCI Express parts meet the latest PCI Express specifications
- Supports 2.5 Gb/s Data Transfer Rate (per pair data bandwidth)
- Accommodates 1.57mm ± 0.20mm [.062" ± .008"] PC board
- Nylon46 insulator
- 1.1 amp current rating per contact

READOUT

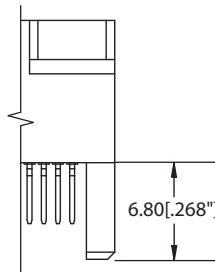


DUAL (D)

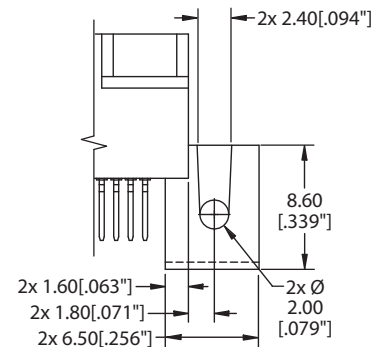
MOUNTING STYLE



NO MOUNTING (N)



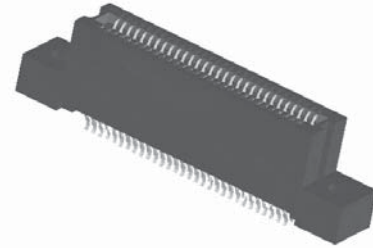
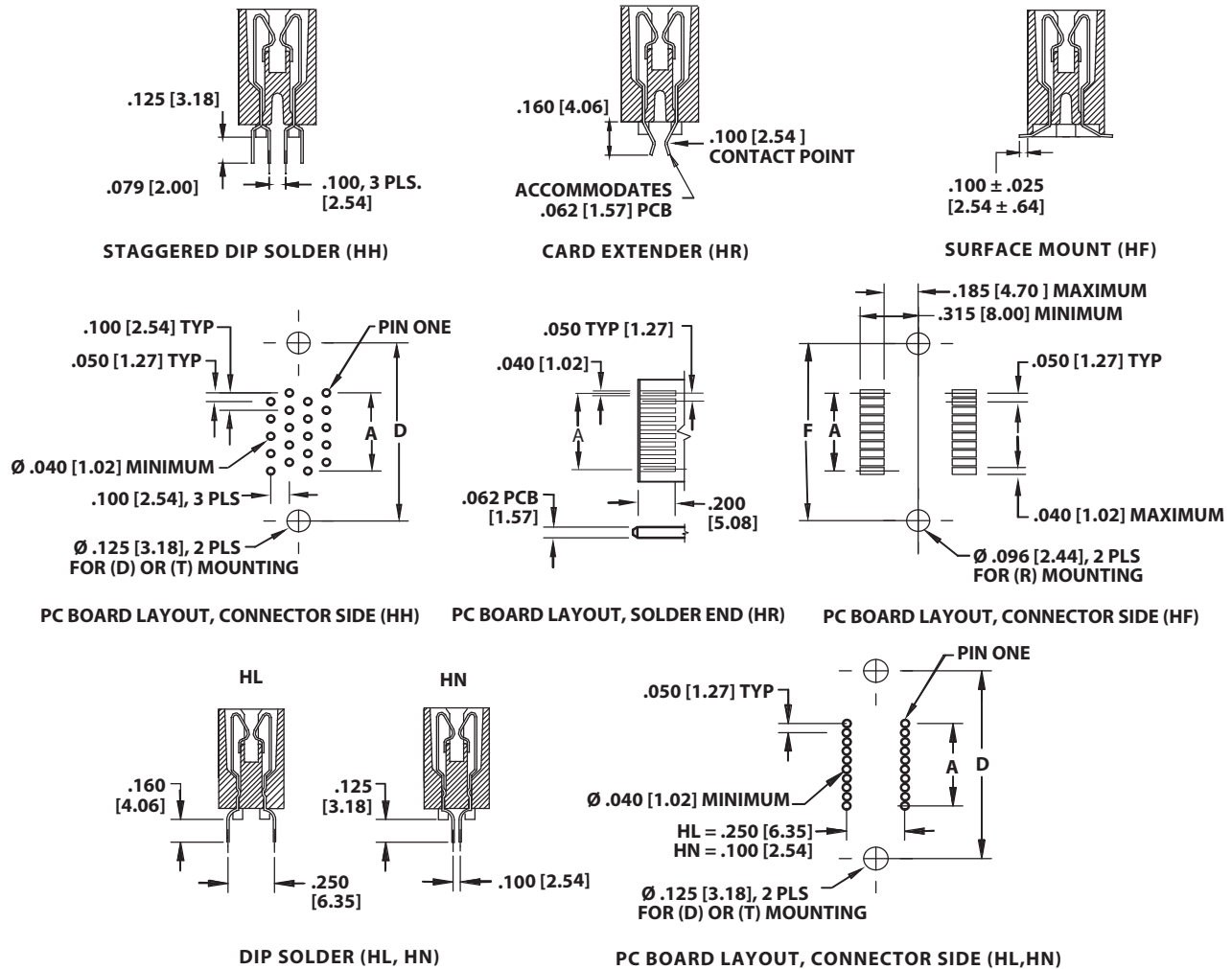
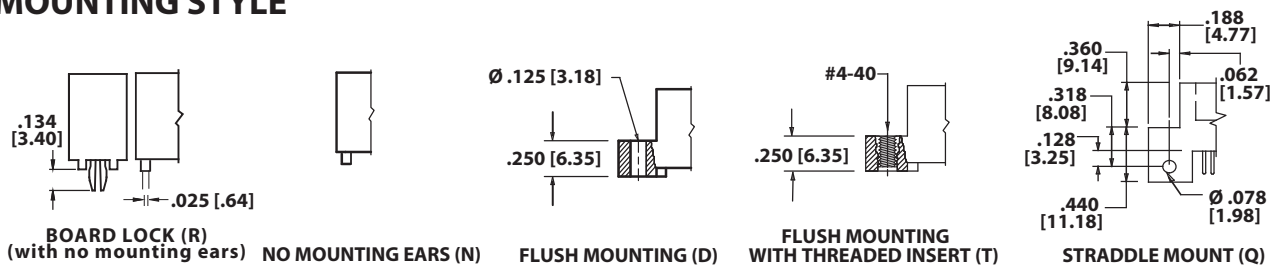
WITH PEGS
('N' Mounting Style with '0' Modification Code)



WITH CLIPS (Q)

**.050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height**
Dip Solder/Card Extender/SMT**SPECIFICATIONS**

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

**TERMINATION TYPE****MOUNTING STYLE**



.050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height
Dip Solder/Card Extender/SMT

PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface Termination
B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS

B = .050 [1.27mm]

NUMBER OF CONTACT POSITIONS

See Chart Below

G B B 40 D HH D - Sxxx

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

MOUNTING STYLE (Opposite Page)

D = Flush Mounting
N = No Mounting
T = Flush Mounting With Threaded Insert
Q = Straddle Mount (Card Extender Only)
R = Metal Boardlocks

TERMINATION TYPE (Opposite Page)

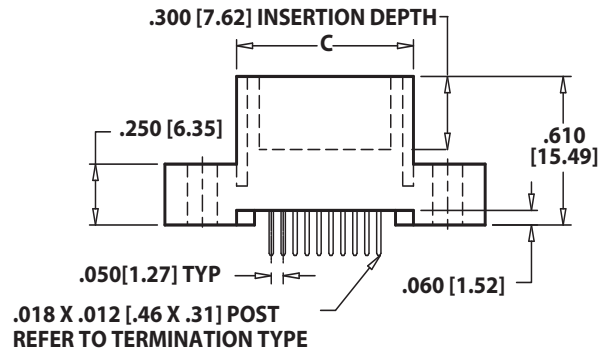
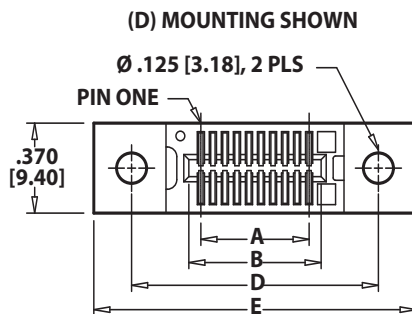
HH = Staggered Dip Solder
HR = Card Extender
HF = Surface Mount
HL = .250 x .160 [6.35mm x 4.06] Dip Solder
HN = .100 x .125 [2.54mm x 3.18] Dip Solder
(Replaces Terminations CH, CR, CF, CL, CN)

READOUT (Opposite Page)

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

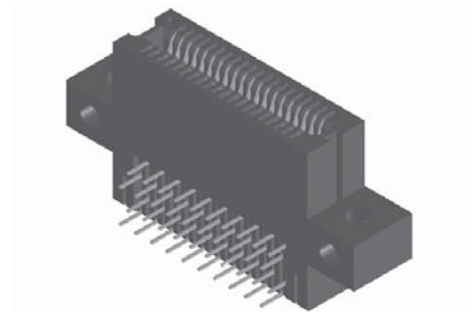
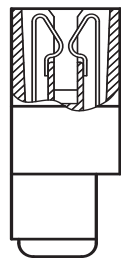
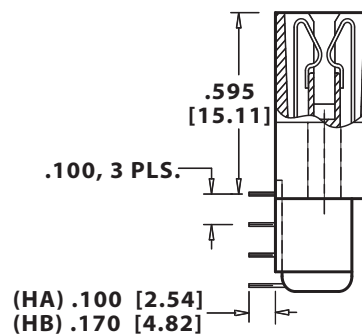
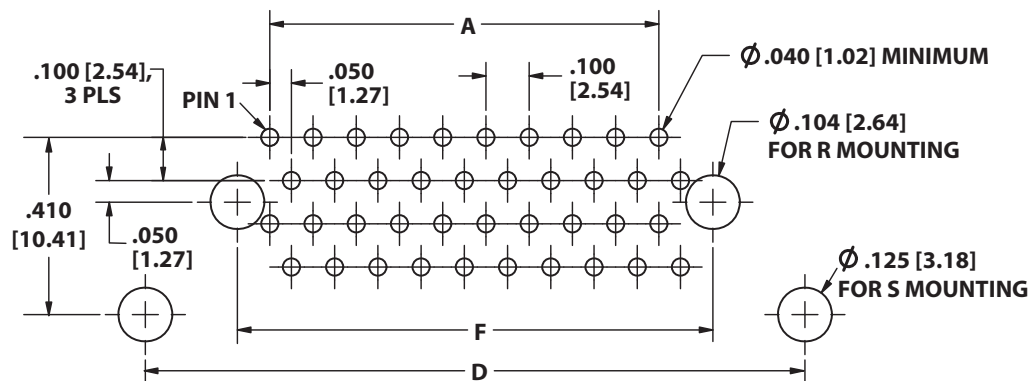
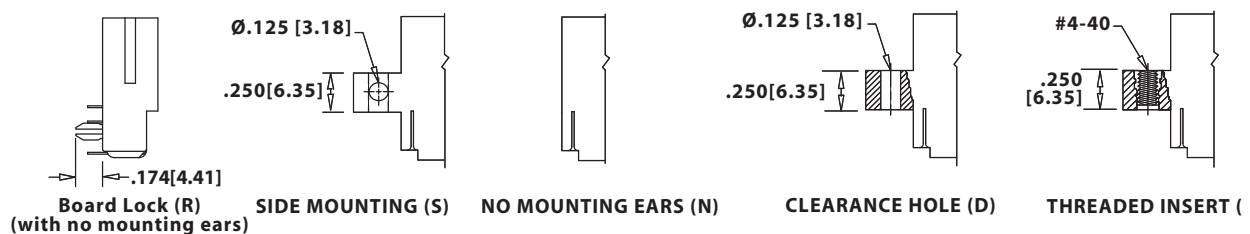


POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A ±.005	B ±.005	C ±.015	D ±.010	E ±.020	F ±.010	A ±.13	B ±.13	C ±.38	D ±.25	E ±.51	F ±.25
05/10	0.200	0.300	0.490	0.776	1.090	0.350	5.08	7.62	12.45	19.71	27.69	8.89
06/12	0.250	0.350	0.540	0.826	1.140	0.400	6.35	8.89	13.72	20.98	28.96	10.16
09/18	0.400	0.500	0.690	0.976	1.290	0.550	10.16	12.70	17.53	24.79	32.77	13.97
10/20	0.450	0.550	0.740	1.026	1.340	0.600	11.43	13.97	18.80	26.06	34.04	15.24
13/26	0.600	0.700	0.890	1.176	1.490	0.750	15.24	17.78	22.61	29.87	37.85	19.05
14/28*	0.650	0.750	0.940	1.226	1.540	0.800	16.51	19.05	23.88	31.14	39.12	20.32
15/30	0.700	0.800	0.990	1.276	1.590	0.850	17.78	20.32	25.15	32.41	40.39	21.59
20/40	0.950	1.050	1.240	1.526	1.840	1.100	24.13	26.67	31.50	38.76	46.74	27.94
22/44	1.050	1.150	1.340	1.626	1.940	1.200	26.67	29.21	34.04	41.30	49.28	30.48
24/48	1.150	1.250	1.440	1.726	2.040	1.300	29.21	31.75	36.58	43.84	51.82	33.02
25/50	1.200	1.300	1.490	1.776	2.090	1.350	30.48	33.02	37.85	45.11	53.09	34.29
30/60	1.450	1.550	1.740	2.026	2.340	1.600	36.83	39.37	44.20	51.46	59.44	40.64
34/68	1.650	1.750	1.940	2.226	2.540	1.800	41.91	44.45	49.28	56.54	64.52	45.72
35/70	1.700	1.800	1.990	2.276	2.590	1.850	43.18	45.72	50.55	57.81	65.79	46.99
40/80	1.950	2.050	2.240	2.526	2.840	2.100	49.53	52.07	56.90	64.16	72.14	53.34
45/90	2.200	2.300	2.490	2.776	3.090	2.350	55.88	58.42	63.25	70.51	78.49	59.69
50/100	2.450	2.550	2.740	3.026	3.340	2.600	62.23	64.77	69.60	76.86	84.84	66.04
55/110*	2.700	2.800	2.990	3.276	3.590	2.850	68.58	71.12	75.95	83.21	91.19	72.39
60/120	2.950	3.050	3.240	3.526	3.840	3.100	74.93	77.47	82.30	89.56	97.54	78.74
64/128	3.150	3.250	3.440	3.726	4.040	3.300	80.01	82.55	87.38	94.64	102.62	83.82
65/130	3.200	3.300	3.490	3.776	4.090	3.350	81.28	83.82	88.65	95.91	103.89	85.09
66/132	3.250	3.350	3.540	3.826	4.140	3.400	82.55	85.09	89.92	97.18	105.16	86.36
70/140	3.450	3.550	3.740	4.026	4.340	3.600	87.63	90.17	95.00	102.26	110.24	91.44
75/150	3.700	3.800	3.990	4.276	4.590	3.850	93.98	96.52	101.35	108.61	116.59	97.79
80/160	3.950	4.050	4.240	4.526	4.840	4.100	100.33	102.87	107.70	114.96	122.94	104.14
85/170	4.200	4.300	4.490	4.776	5.090	4.350	106.68	109.22	114.05	121.31	129.29	110.49
90/180	4.450	4.550	4.740	5.026	5.340	4.600	113.03	115.57	120.40	127.66	135.64	116.84
95/190	4.700	4.800	4.990	5.276	5.590	4.850	119.38	121.92	126.75	134.01	141.99	123.19
100/200	4.950	5.050	5.240	5.526	5.840	5.100	125.73	128.27	133.10	140.36	148.34	129.54
105/210	5.200	5.300	5.490	5.776	6.090	5.350	132.08	134.62	139.45	146.71	154.69	135.89
108/216	5.350	5.450	5.640	5.926	6.240	5.500	135.89	138.43	143.26	150.52	158.50	139.70
110/220	5.450	5.550	5.740	6.026	6.340	5.600	138.43	140.97	145.80	153.06	161.04	142.24
120/240	5.950	6.050	6.240	'N' Mounting Only		6.100	151.13	153.67	158.50	'N' Mounting Only		154.94

* Consult Factory For Availability

**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
Right Angle****SPECIFICATIONS**

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

**READOUT****DUAL (D)****TERMINATION TYPE****PCB LAYOUT****PCB LAYOUT, COMPONENT SIDE****MOUNTING STYLE**

**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
Right Angle**



PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface Termination
B = .000100" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS

B = .050" [1.27mm]

G B B 10 D HA S - Sxxx

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

MOUNTING STYLE (Opposite Page)

S = Side Mounting
D = Flush Mounting
N = No Mounting
T = Flush Mounting With Threaded Insert
R = Metal Board Lock

TERMINATION TYPE (Opposite Page)

HA = .100" Staggered Dip Solder, Right Angle
HB = .170" Staggered Dip Solder, Right Angle

READOUT (Opposite Page)

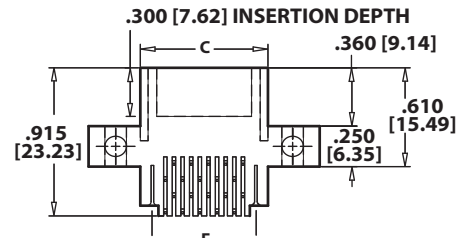
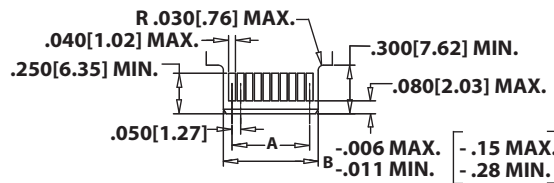
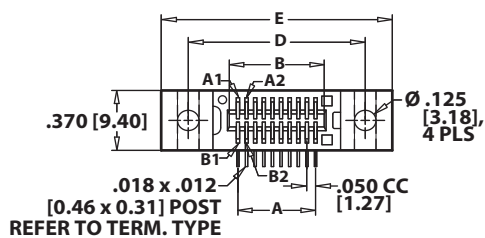
D = Dual

NUMBER OF CONTACT POSITIONS

See Chart Below

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



CARD LAYOUT

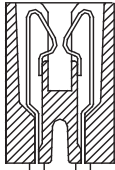
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A	B	C	D	E	F	A	B	C	D	E	F
	±.005	±.005	±.015	±.010	±.020	±.010	±.13	±.13	±.38	±.25	±.51	±.25
05/10	0.200	0.300	0.490	0.776	1.090	0.350	5.08	7.62	12.45	19.71	27.69	8.89
06/12	0.250	0.350	0.540	0.826	1.140	0.400	6.35	8.89	13.72	20.98	28.96	10.16
09/18	0.400	0.500	0.690	0.976	1.290	0.550	10.16	12.70	17.53	24.79	32.77	13.97
10/20	0.450	0.550	0.740	1.026	1.340	0.600	11.43	13.97	18.80	26.06	34.04	15.24
13/26	0.600	0.700	0.890	1.176	1.490	0.750	15.24	17.78	22.61	29.87	37.85	19.05
14/28	0.650	0.750	0.940	1.226	1.540	0.800	16.51	19.05	23.88	31.14	39.12	20.32
15/30	0.700	0.800	0.990	1.276	1.590	0.850	17.78	20.32	25.15	32.41	40.39	21.59
20/40	0.950	1.050	1.240	1.526	1.840	1.100	24.13	26.67	31.50	38.76	46.74	27.94
22/44	1.050	1.150	1.340	1.626	1.940	1.200	26.67	29.21	34.04	41.30	49.28	30.48
24/48	1.150	1.250	1.440	1.726	2.040	1.300	29.21	31.75	36.58	43.84	51.82	33.02
25/50	1.200	1.300	1.490	1.776	2.090	1.350	30.48	33.02	37.85	45.11	53.09	34.29
30/60	1.450	1.550	1.740	2.026	2.340	1.600	36.83	39.37	44.20	51.46	59.44	40.64
34/68	1.650	1.750	1.940	2.226	2.540	1.800	41.91	44.45	49.28	56.54	64.52	45.72
35/70	1.700	1.800	1.990	2.276	2.590	1.850	43.18	45.72	50.55	57.81	65.79	46.99
40/80	1.950	2.050	2.240	2.526	2.840	2.100	49.53	52.07	56.90	64.16	72.14	53.34
45/90	2.200	2.300	2.490	2.776	3.090	2.350	55.88	58.42	63.25	70.51	78.49	59.69
50/100	2.450	2.550	2.740	3.026	3.340	2.600	62.23	64.77	69.60	76.86	84.84	66.04
55/110	2.700	2.800	2.990	3.276	3.590	2.850	68.58	71.12	75.95	83.21	91.19	72.39
60/120	2.950	3.050	3.240	3.526	3.840	3.100	74.93	77.47	82.30	89.56	97.54	78.74
64/128	3.150	3.250	3.440	3.726	4.040	3.300	80.01	82.55	87.38	94.64	102.62	83.82
65/130	3.200	3.300	3.490	3.776	4.090	3.350	81.28	83.82	88.65	95.91	103.89	85.09
66/132	3.250	3.350	3.540	3.826	4.140	3.400	82.55	85.09	89.92	97.18	105.16	86.36
70/140	3.450	3.550	3.740	4.026	4.340	3.600	87.63	90.17	95.00	102.26	110.24	91.44
75/150	3.700	3.800	3.990	4.276	4.590	3.850	93.98	96.52	101.35	108.61	116.59	97.79
80/160	3.950	4.050	4.240	4.526	4.840	4.100	100.33	102.87	107.70	114.96	122.94	104.14
85/170	4.200	4.300	4.490	4.776	5.090	4.350	106.68	109.22	114.05	121.31	129.29	110.49
90/180	4.450	4.550	4.740	5.026	5.340	4.600	113.03	115.57	120.40	127.66	135.64	116.84
95/190	4.700	4.800	4.990	5.276	5.590	4.850	119.38	121.92	126.75	134.01	141.99	123.19
100/200	4.950	5.050	5.240	5.526	5.840	5.100	125.73	128.27	133.10	140.36	148.34	129.54
105/210	5.200	5.300	5.490	5.776	6.090	5.350	132.08	134.62	139.45	146.71	154.69	135.89
108/216	5.350	5.450	5.640	5.926	6.240	5.500	135.89	138.43	143.26	150.52	158.50	139.70
110/220	5.450	5.550	5.740	6.026	6.340	5.600	138.43	140.97	145.80	153.06	161.04	142.24
120/240	5.950	6.050	6.240	'N' Mounting Only		6.100	151.13	153.67	158.50	'N' Mounting Only		154.94



SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board (Consult factory for other board thicknesses)
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

READOUT

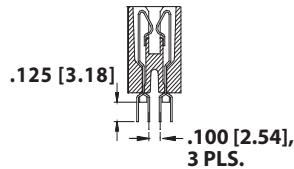


DUAL (D)

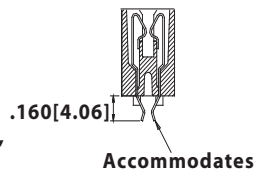


TERMINATION TYPE

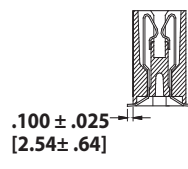
Consult Factory for PC Board Layouts



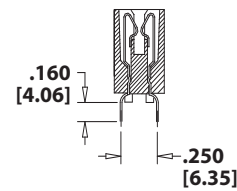
STAGGERED DIP SOLDER (HH)



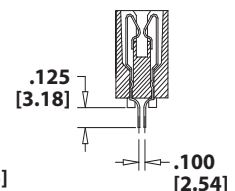
Accommodates
.062 PCB
CARD EXTENDER (HR)



SURFACE MOUNT (HF)

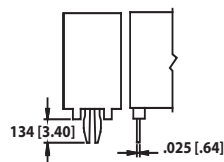


DIP SOLDER (HL)



DIP SOLDER (HN)

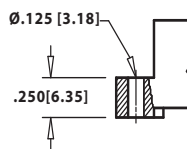
MOUNTING STYLE



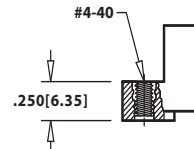
BOARD LOCK (R)
(with no mounting ears)



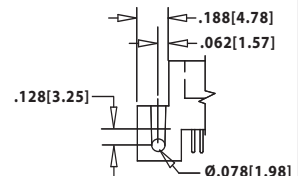
NO MOUNTING EARS (N)



FLUSH MOUNTING (D)



FLUSH MOUNTING WITH THREADED INSERT (T)



STRADDLE MOUNT (Q)



**.050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height
[MCA] Dip Solder/Card Extender/SMT**

Industry Standard Part

PART NUMBER CODING

MATERIALS (Insulator/Contact) **G B B 56 D HH D - S578**

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface **Termination**
B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS

B = .050" [1.27mm]

NUMBER OF CONTACT POSITIONS

56, 66, 91, 106

MODIFICATION (Consult Factory)

-S578 = Card Slot Barriers With Guide Posts
-S621 = Card Slot Barriers Without Guide Posts

MOUNTING STYLE

N = No Mounting
D = Flush Mounting
T = Flush Mounting With Threaded Insert
Q = Straddle Mount (Card Extender Only)
R = Metal Board Lock

TERMINATION TYPE

HH = Staggered Dip Solder
HR = Card Extender
HF = Surface Mount
HL = .250" [6.35mm] x .160" [4.06mm] Dip Solder
HN = .100" [2.54mm] x .125" [3.18mm] Dip Solder
(REPLACES TERMINATIONS: CH, CR, CF, CL, CN)

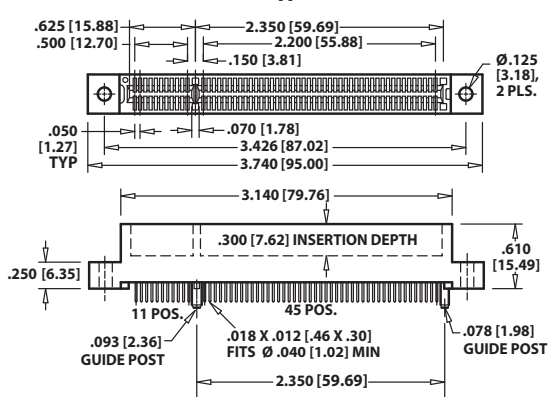
READOUT

D = Dual

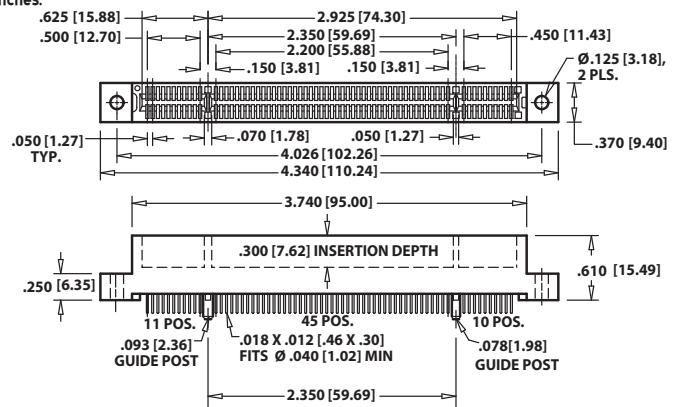
Sullins Edgecards

DIMENSIONS

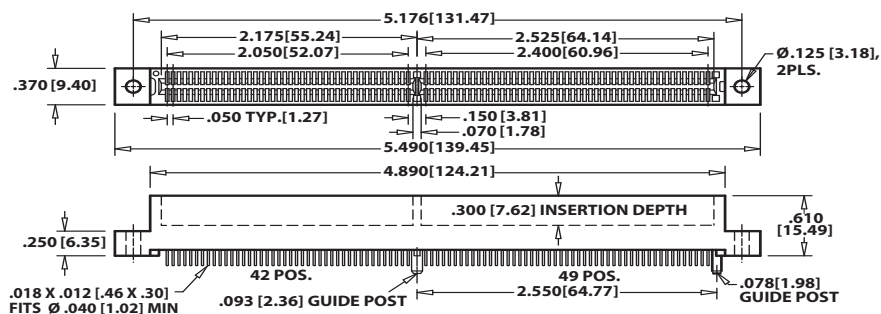
Dimensions in [] are in millimeters, all others are in inches.



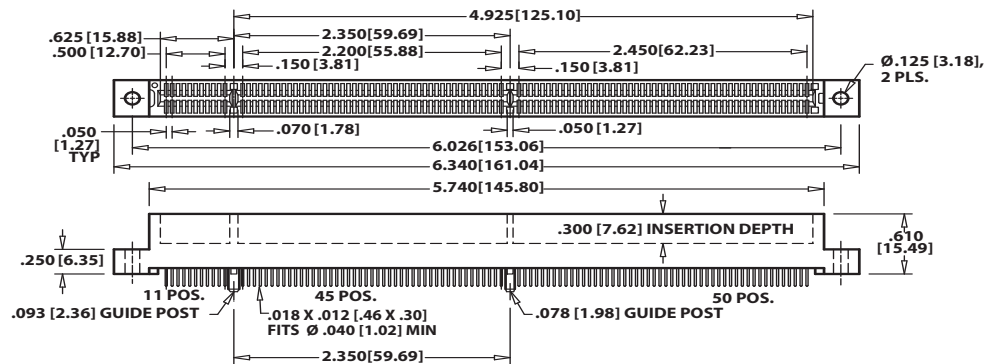
GBB56DHHD-S578, 56 (11/45) POSITIONS



GBB66DHHD-S578, 66 (11/45/10) POSITIONS



GBB91DHHD-S578, 91 (42/49) POSITIONS



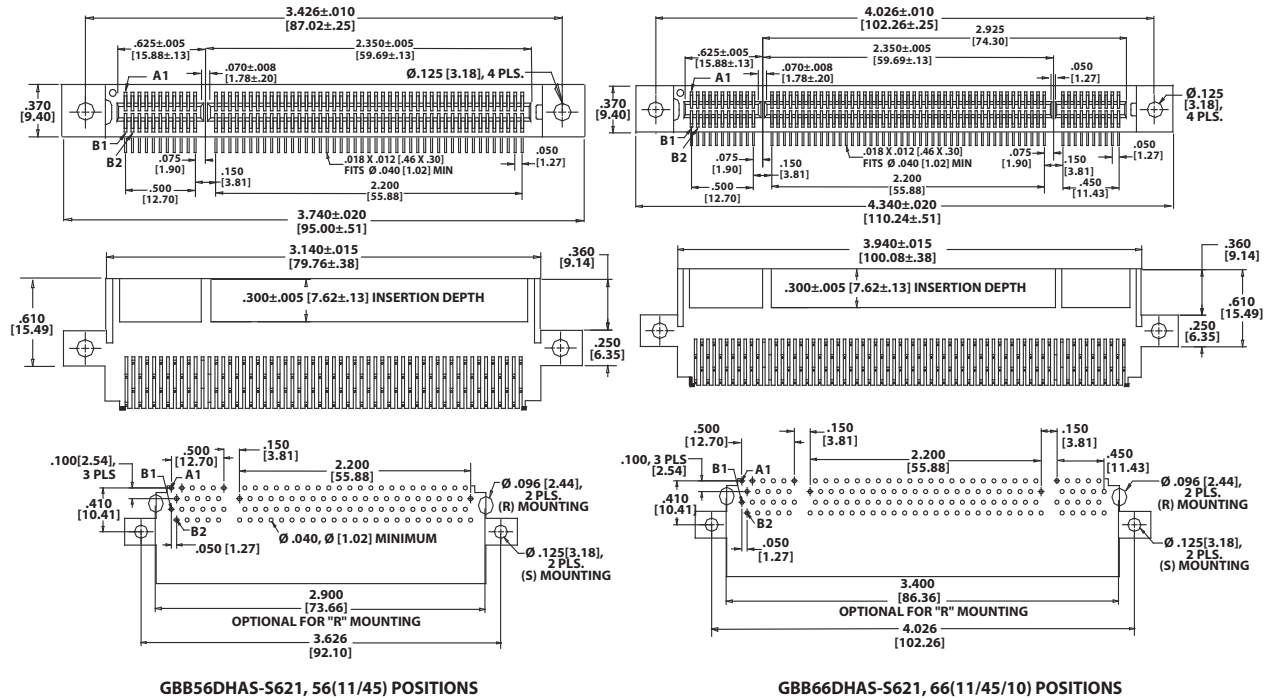
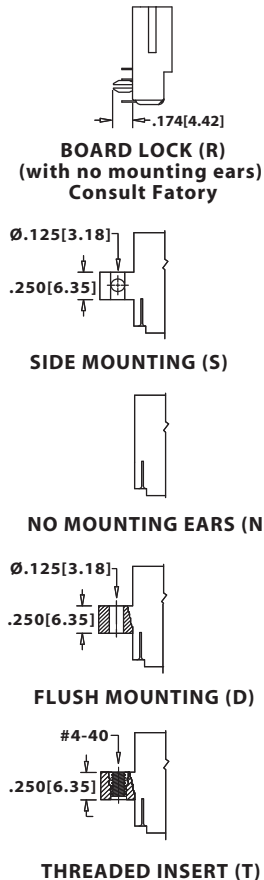
GBB106DHHD-S578, 106 (11/45/50) POSITIONS

**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
[MCA] Right Angle**

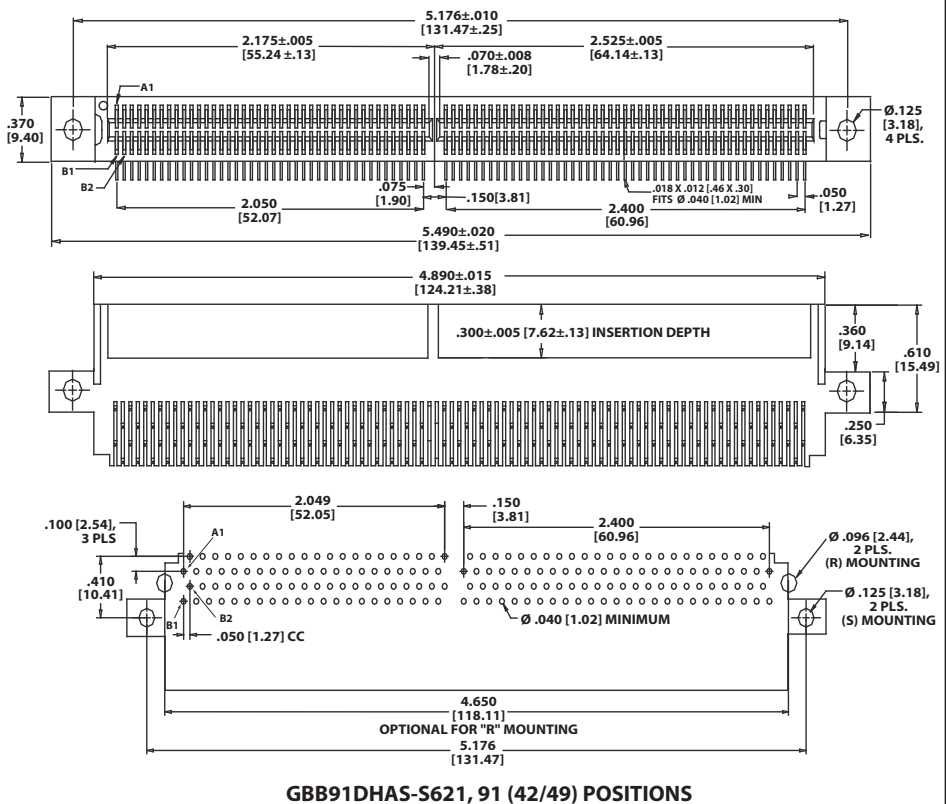
Industry Standard Part

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

**MOUNTING STYLE****DIMENSIONS**

Dimensions in [] are in millimeters, all others are in inches.





**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
[MCA] Right Angle**

Industry Standard Part

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte

CONTACT CENTERS

B = .050" [1.27mm]

G B B 56 D HA D - S621

MODIFICATION (CONSULT FACTORY)

-S621 = Card Slot Barriers Without Guide Posts

MOUNTING STYLE (Opposite Page)

S = Side Mounting
D = Flush Mounting
N = No Mounting
T = Flush Mounting With Threaded Insert
R = Metal Board Lock

TERMINATION TYPE

HA = .100" [2.54] Staggered Dip Solder, Right Angle
HB = .170" [4.32] Staggered Dip Solder, Right Angle

READOUT

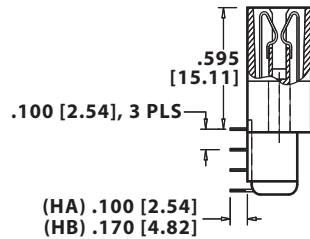
D = Dual

NUMBER OF CONTACT POSITIONS

56 = 11/45
66 = 11/45/10
91 = 42/49
106 = 11/45/50

Sullins Edgecards

TERMINATION TYPE

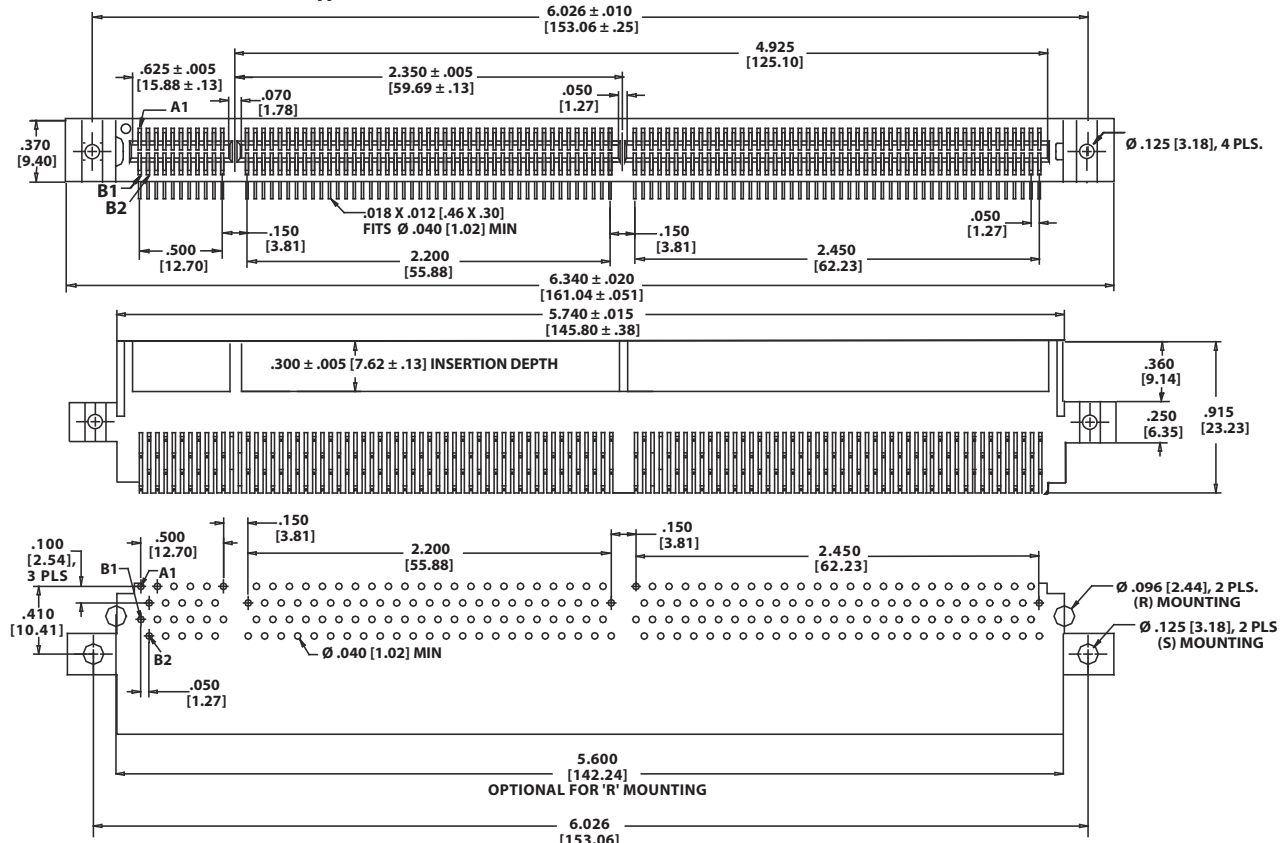


SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



**BOARD LAYOUT, CONNECTOR SIDE
GBB106DHAS-S621, 64 BIT, 5 VOLT**

**.050" [1.27 mm] Contact Centers, .610" [15.49 mm] Insulator Height
[PCI] Dip Solder/Card Extender/SMT**

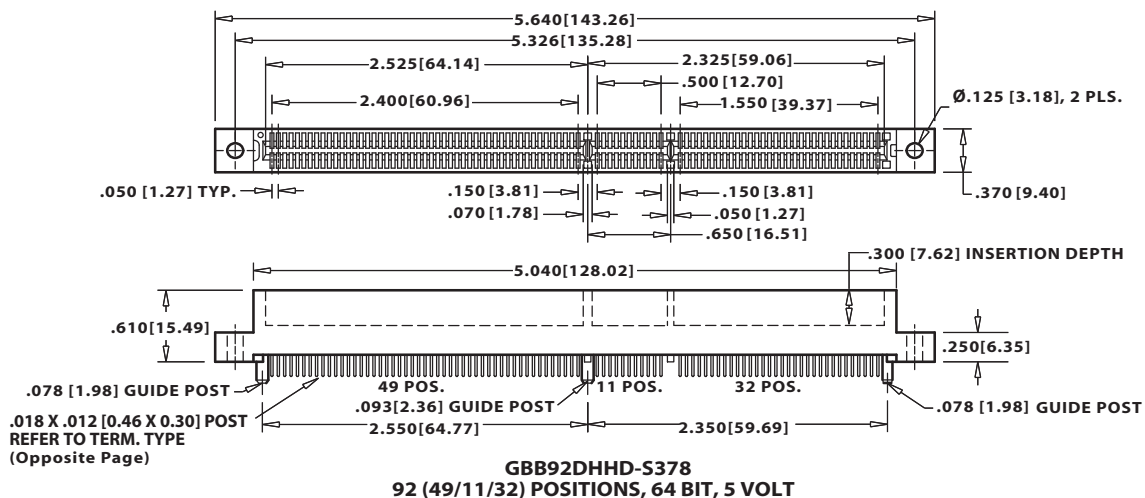
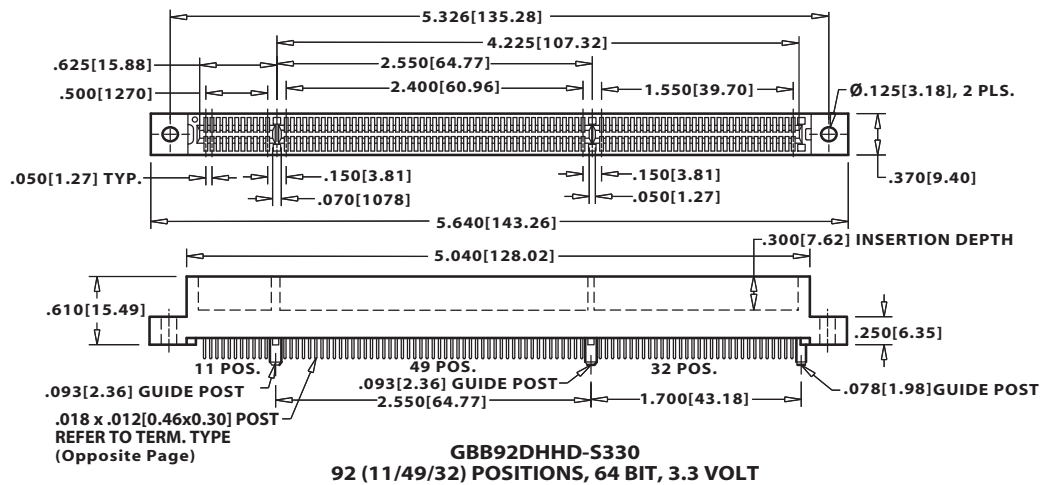
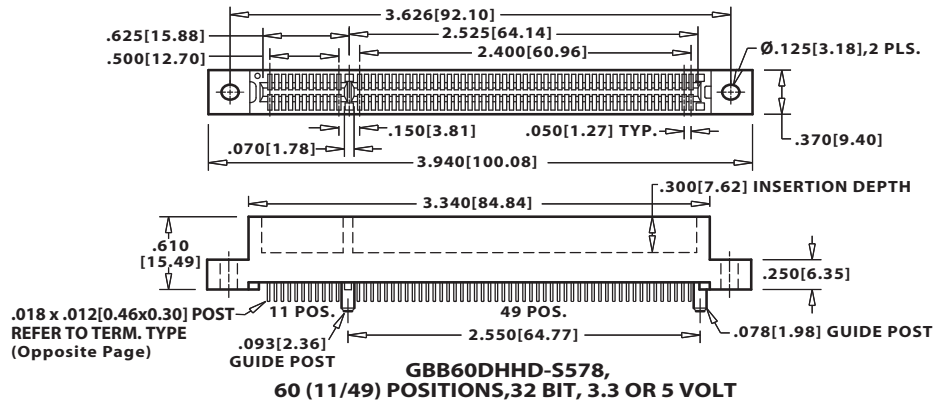
Industry Standard Part

SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force minimum

READOUT**DUAL (D)****DIMENSIONS**

Dimensions in [] are in millimeters, all others are in inches.





**.050" [1.27mm] Contact Centers, .610" [15.49 mm] Insulator Height
[PCI] Dip Solder/Card Extender/SMT**

Industry Standard Part

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination
B =	.000010" Gold	.000100" Pure Tin, Matte
C =	.000030" Gold	.000100" Pure Tin, Matte

CONTACT CENTERS

B = .050" [1.27mm]

NUMBER OF CONTACT POSITIONS

60 = 11/49 (32 Bit, 3.3 or 5 Volt)
92 = 11/49/32 (64 Bit, 3.3 Volt)
or 92 = 49/11/32 (64 Bit, 5 Volt)

READOUT

D = Dual

G B B 60 D HH D - S578

MODIFICATION (CONSULT FACTORY)

PCI WITH GUIDE POSTS

*-S578 = 60 (11/49) Positions(32 Bit, 3.3 or 5 Volt)
-S330 = 92 (11/49/32) Positions(64 Bit, 3.3 Volt)
-S378 = 92 (49/11/32) Positions(64 Bit, 5 Volt)

PCI WITHOUT GUIDE POSTS

*-S621 = 60 (11/49) Positions(32 Bit, 3.3 or 5 Volt)
-S329 = 92 (11/49/32) Positions(64 Bit, 3.3 Volt)
-S250 = 92 (49/11/32) Positions(64 Bit, 5 Volt)

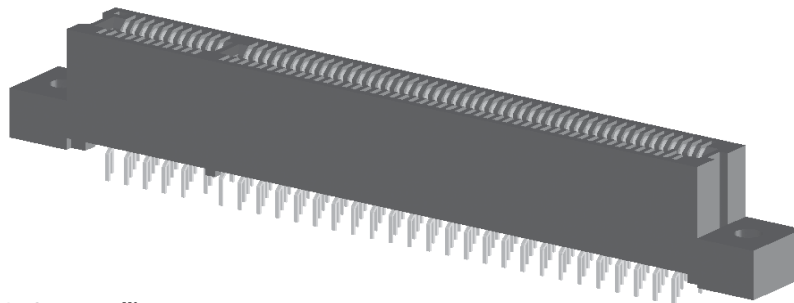
* Turn connector or board 180° to switch from 3.3 to 5 volt

MOUNTING STYLE

D = Flush Mounting
N = No Mounting
T = Flush Mounting With Threaded Insert
Q = Straddle Mount (Card Extender Only)
R = Metal Boardlocks

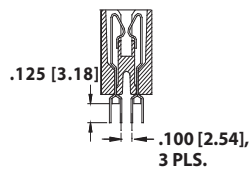
TERMINATION TYPE

HH = Staggered Dip Solder
HR = Card Extender
HF = Surface Mount
HL = .250" [6.35mm] x .160" [4.06mm] Dip Solder
HN = .100" [2.54mm] x .125" [3.18mm] Dip Solder
(REPLACES TERMINATIONS: CH, CR, CF, CL, CN)

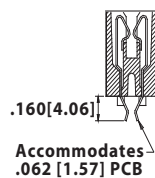


FOR PC BOARD LAYOUTS REFER TO www.sullinscorp.com

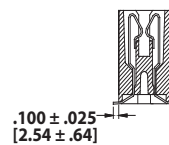
TERMINATION TYPE



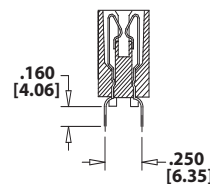
STAGGERED DIP SOLDER (HH)



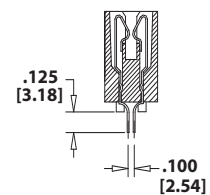
CARD EXTENDER (HR)



SURFACE MOUNT (HF)



DIP SOLDER (HL)

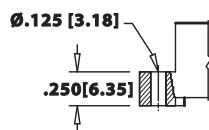


DIP SOLDER (HN)

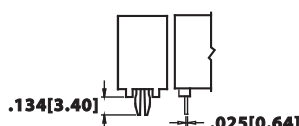
MOUNTING STYLE



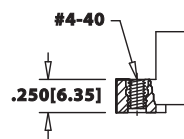
NO MOUNTING EARS (N)



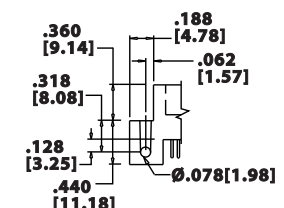
FLUSH MOUNTING (D)



METAL BOARD LOCK (with no mounting ears) (R)



FLUSH MOUNTING WITH THREADED INSERT (T)



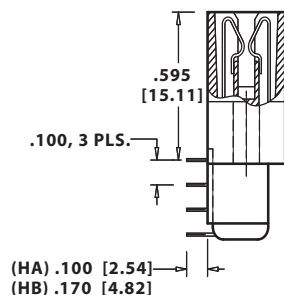
STRADDLE MOUNT (Q) Formerly (Z)

**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
[PCI] Right Angle**

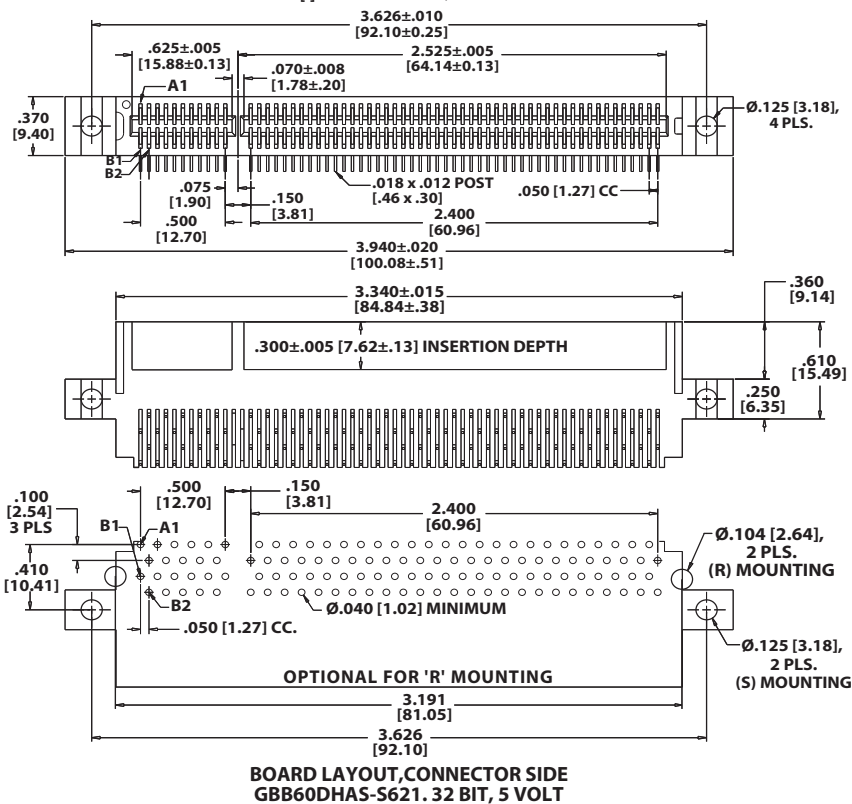
Industry Standard Part

SPECIFICATIONS

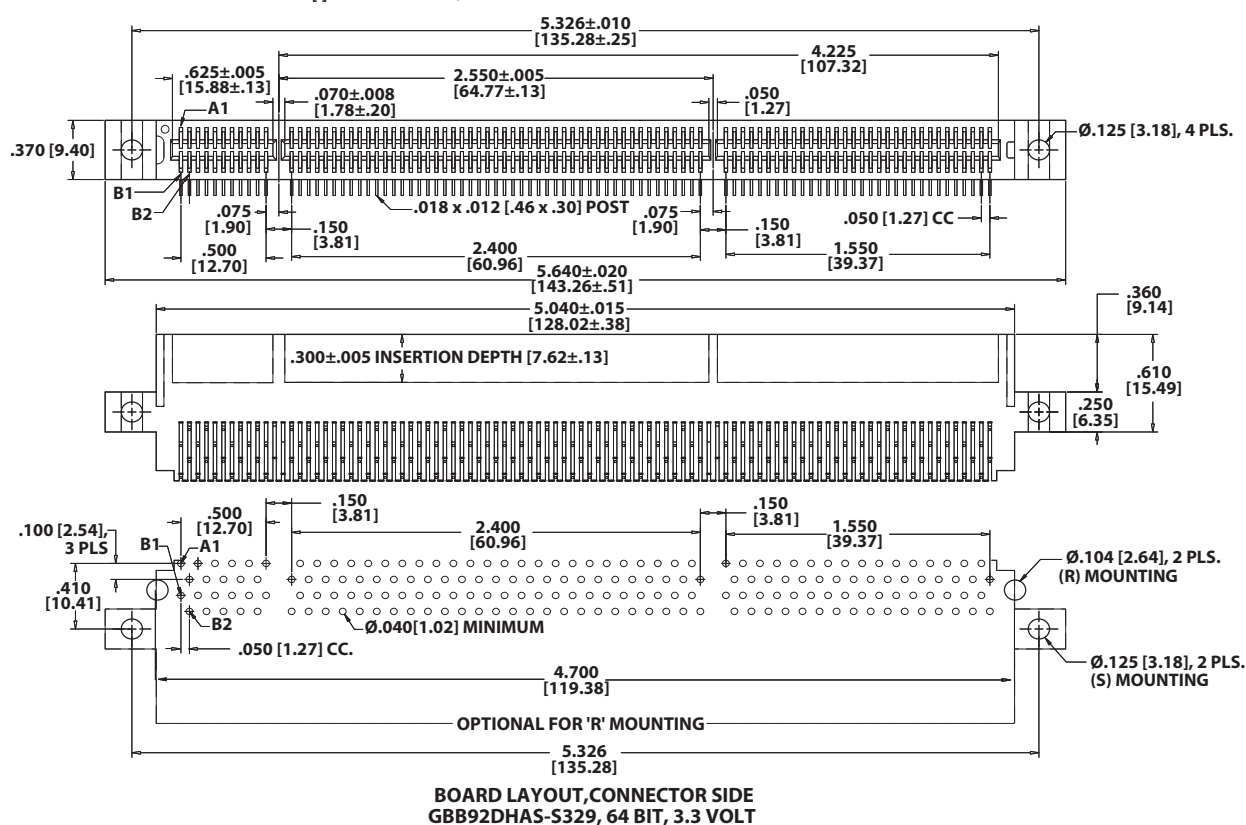
- Accommodates $.062" \pm .008"$
[1.57 $\pm$.20] PC board
- PPS or PA9T insulator
- Molded-in key available
- High reliability/high cycle
hairpin bellows contact
- 1 amp current rating per contact
- 150 grams normal force
minimum

TERMINATION TYPE**DIMENSIONS**

Dimensions in [] are in millimeters, all others are in inches.

**DIMENSIONS**

Dimensions in [] are in millimeters, all others are in inches.



**.050" [1.27 mm] Contact Centers, .915" [23.23 mm] Insulator Height
[PCI] Right Angle**

Industry Standard Part

PART NUMBER CODING

MATERIALS (Insulator/Contact) **G B B 60 D HA D - S793**

E = PBT/Phosphor Bronze
H = PBT/Beryllium Copper
G = PA9T/Phosphor Bronze
R = PPS/Phosphor Bronze
J = PA9T/Beryllium Copper
A = PPS/Beryllium Copper

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate
Contact Surface Termination

B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS

B = .050" [1.27mm]

NUMBER OF CONTACT POSITIONS

60 = 11/49 (32 Bit, 3.3 or 5 Volt)
92 = 11/49/32 (64 Bit, 3.3 Volt)
or 92 = 49/11/32 (64 Bit, 5 Volt)

MODIFICATION (CONSULT FACTORY)

-S793 = 60(49/11) Reverse Bend (32 Bit, 3.3 Volt)
-S621 = 60(11/49) Positions (32 Bit, 5 Volt)
-S329 = 92(11/49/32) Positions (64 Bit, 3.3 Volt)
-S250 = 92(49/11/32) Positions (64 Bit, 5 Volt)

MOUNTING STYLE

S = Side Mounting
D = Flush Mounting
N = No Mounting
T = Flush Mounting With Threaded Insert
R = Metal Board Lock

TERMINATION TYPE (Opposite Page)

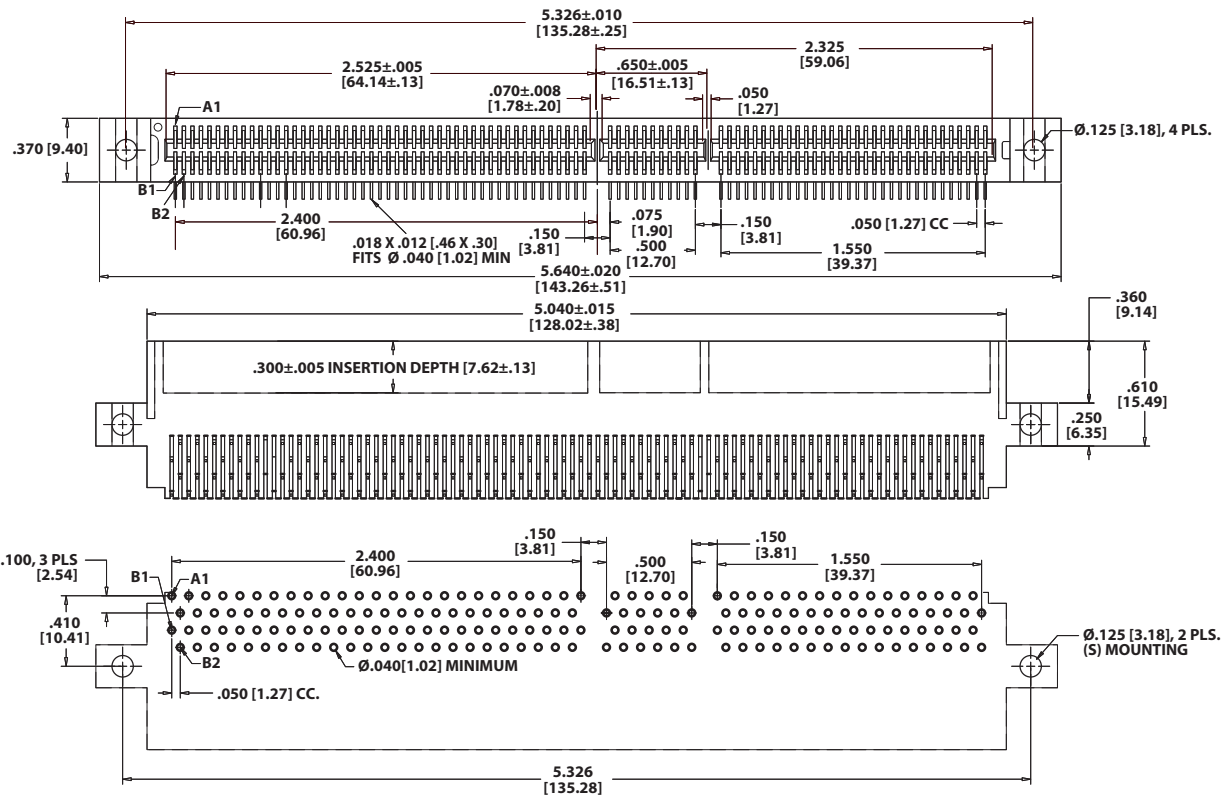
HA = .100" [2.54mm] Staggered Dip Solder
HB = .170" [4.32mm] Staggered Dip Solder

READOUT

D = Dual

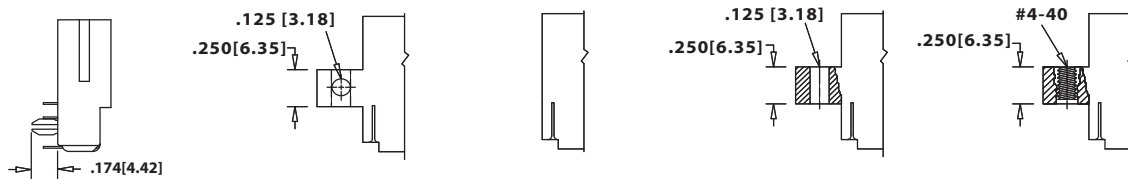
DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



**BOARD LAYOUT, CONNECTOR SIDE
GBB92DHAS-S250, 64 BIT, 5 VOLT**

MOUNTING STYLE



BOARD LOCK (R)
(with no mounting ears)

SIDE MOUNTING (S)

NO MOUNTING EARS (N)

FLUSH MOUNTING (D)

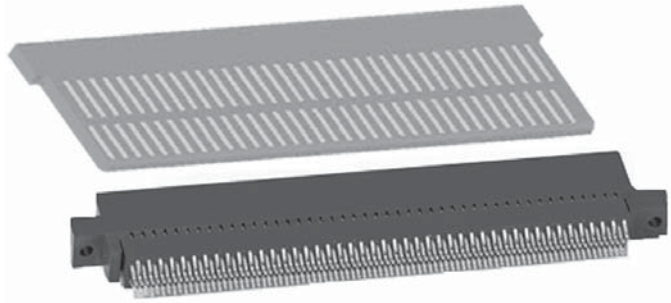
THREADED INSERT (T)



Bi-Level, .050" [1.27 mm] / .100" [2.54 mm] Contact Centers High Density, Card Extender, Dip Solder for .062" [1.57] or .093" [2.36]

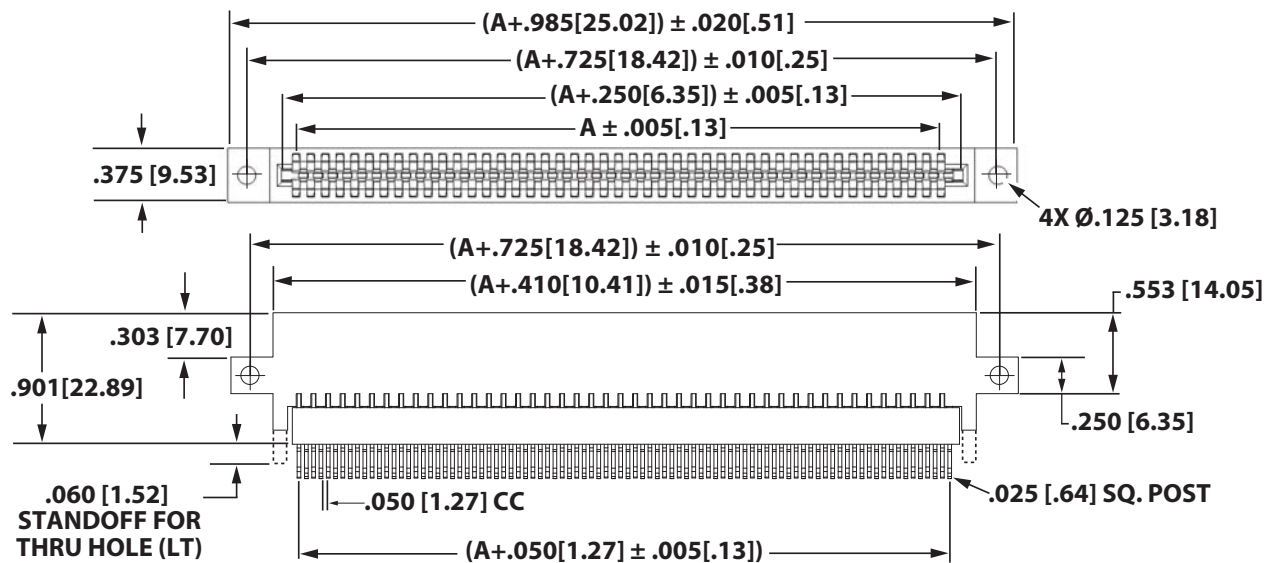
SPECIFICATIONS

- .050" Contact Center Spacing can replace .100" CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] or .093" $\pm$.008" [2.36 $\pm$.20] PC board
- Contact Material: Beryllium Copper or Phosphor Bronze
- Body Material: PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings

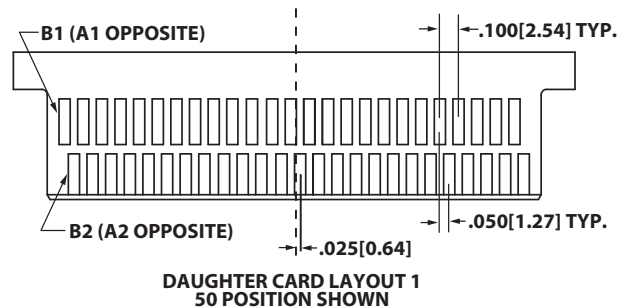


HIGH DENSITY HIGH TEMPERATURE HIGH CYCLE HIGH RELIABILITY

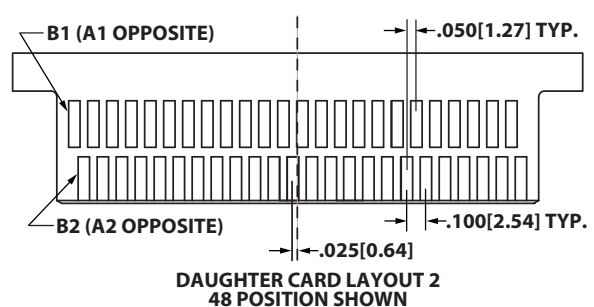
DIMENSIONS



DAUGHTER CARD LAYOUT (1)



DAUGHTER CARD LAYOUT (2)



Bi-Level, .050" [1.27 mm] / .100" [2.54 mm] Contact Centers
High Density, Card Extender, Dip Solder for .062" [1.57] or .093" [2.36]



PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

- G = PA9T/Phosphor Bronze
Operating Temperature: 125°C
J = PA9T/Beryllium Copper
Operating Temperature: 150°C

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination
B =	.000010" Gold	.000100" Pure Tin, Matte
C =	.000030" Gold	.000100" Pure Tin, Matte
Y =	.000030" Gold	.000005" Gold

CONTACT CENTERS

B = .050" [1.27mm]

J C B 10 D LT H - Sxxx

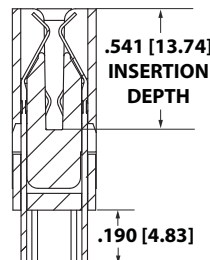
MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

-S1176 = For .093"±.008" [2.36 ± .20]
Thick Mating PCB

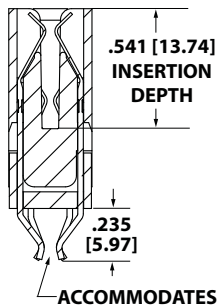
Positions	Dimension A (see opposite page)			Daughter Card Layout
	No. of Contacts	Inches	[MM]	
06	12	0.200	5.08	1
08	16	0.300	7.62	2
10	20	0.400	10.16	1
12	24	0.500	12.70	2
14	28	0.600	15.24	1
16	32	0.700	17.78	2
18	36	0.800	20.32	1
20	40	0.900	22.86	2
22	44	1.000	25.40	1
24	48	1.100	27.94	2
26	52	1.200	30.48	1
28	56	1.300	33.02	2
30	60	1.400	35.56	1
32	64	1.500	38.10	2
34	68	1.600	40.64	1
36	72	1.700	43.18	2
38	76	1.800	45.72	1
40	80	1.900	48.26	2
42	84	2.000	50.80	1
44	88	2.100	53.34	2
46	92	2.200	55.88	1
48	96	2.300	58.42	2
50	100	2.400	60.96	1
52	104	2.500	63.50	2
54	108	2.600	66.04	1
56	112	2.700	68.58	2
58	116	2.800	71.12	1
60	120	2.900	73.66	2
62	124	3.000	76.20	1
64	128	3.100	78.74	2
66	132	3.200	81.28	1
68	136	3.300	83.82	2
70	140	3.400	86.36	1
72	144	3.500	88.90	2
74	148	3.600	91.44	1
76	152	3.700	93.98	2
78	156	3.800	96.52	1
80	160	3.900	99.06	2
82	164	4.000	101.60	1
84	168	4.100	104.14	2
86	172	4.200	106.68	1
88	176	4.300	109.22	2
90	180	4.400	111.76	1

TERMINATION

DIP SOLDER
LT



CARD EXTENDER
LR

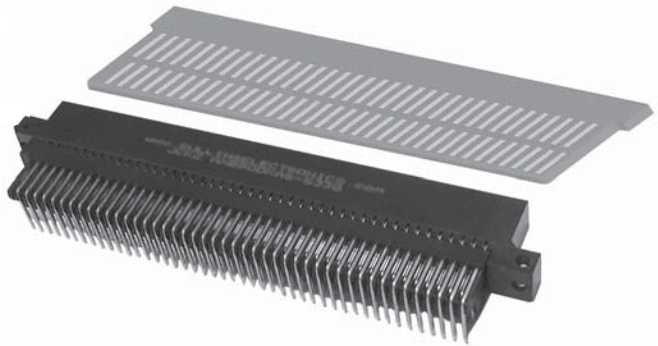
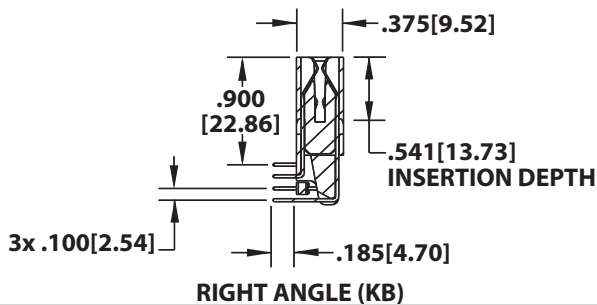


MOUNTING STYLE

H	MOUNTING HOLES	
S	SIDE MOUNTING HOLES	
I	#4-40 THREADED INSERTS	
A	#4-40 THREADED INSERTS IN SIDE HOLES	
Z	FLUSH EARS WITH SIDE MOUNTING HOLES	
D	FLUSH EARS WITH Ø.125 HOLES	
T	FLUSH EARS WITH #4-40 THREADED INSERTS	
V	FLUSH EARS WITH #4-40 THREADED INSERTS IN SIDE HOLES	
N	NO MOUNTING EARS	

**Bi-Level, .050" [1.27 mm] / .100" [2.54 mm] Contact Centers**
High Density, Right Angle for .062" [1.57] or .093" [2.36]**SPECIFICATIONS**

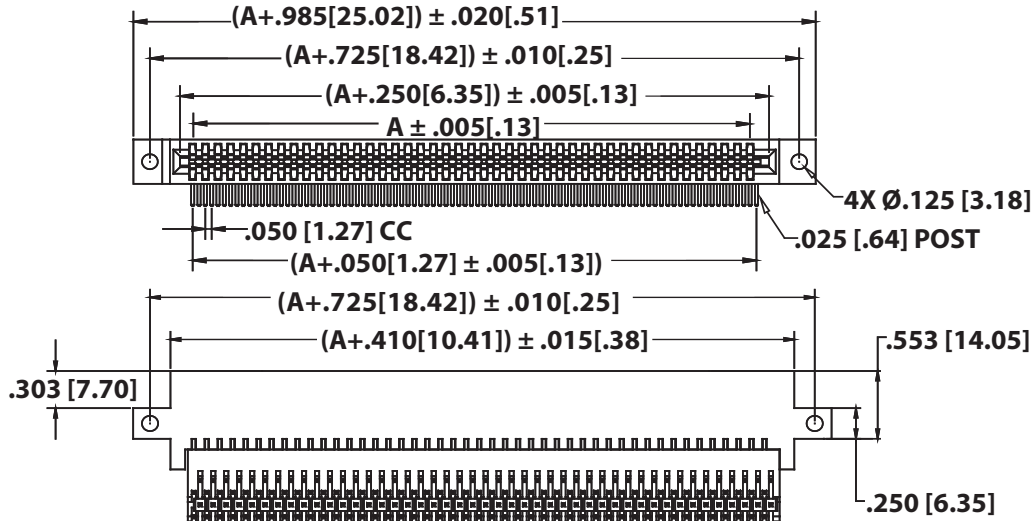
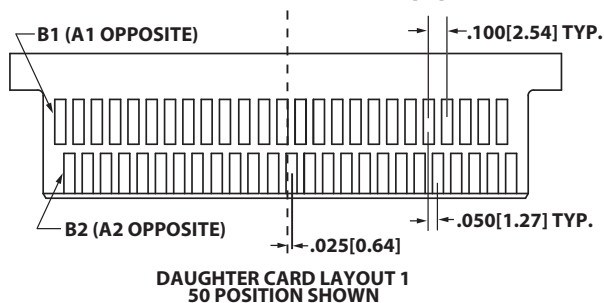
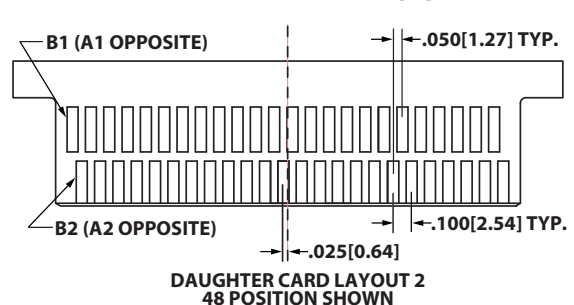
- .050" Contact Center Spacing can replace .100" CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] or .093" $\pm$.008" [2.36 $\pm$.20] PC board
- Contact Material: Beryllium Copper or Phosphor Bronze
- Body Material: PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings

**TERMINATION TYPE**

HIGH DENSITY
HIGH TEMPERATURE
HIGH CYCLE
HIGH RELIABILITY

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

**DAUGHTER CARD LAYOUT (1)****DAUGHTER CARD LAYOUT (2)**

Bi-Level, .050" [1.27 mm] / .100" [2.54 mm] Contact Centers
High Density, Right Angle for .062" [1.57] or .093" [2.36]



PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

- G = PA9T/Phosphor Bronze
Operating Temperature: 125°C
J = PA9T/Beryllium Copper
Operating Temperature: 150°C

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate
Contact Surface Termination

- B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte
Y = .000030" Gold .000005" Gold

CONTACT CENTERS

- B = .050" [1.27mm]

J C B 10 D KB S - S1075

OMIT FOR STANDARD

- S1176 = For .093" ± .008" [2.36 ± .20]
Thick Mating PCB
S - S1075 = Staggered Ears with
Side Mounting Holes
A - S1076 = Staggered Ears with
#4-40 Threaded Inserts

Positions	Dimension A (see opposite page)			Daughter Card Layout
	No. of Contacts	Inches	[MM]	
06	12	0.200	5.08	1
08	16	0.300	7.62	2
10	20	0.400	10.16	1
12	24	0.500	12.70	2
14	28	0.600	15.24	1
16	32	0.700	17.78	2
18	36	0.800	20.32	1
20	40	0.900	22.86	2
22	44	1.000	25.40	1
24	48	1.100	27.94	2
26	52	1.200	30.48	1
28	56	1.300	33.02	2
30	60	1.400	35.56	1
32	64	1.500	38.10	2
34	68	1.600	40.64	1
36	72	1.700	43.18	2
38	76	1.800	45.72	1
40	80	1.900	48.26	2
42	84	2.000	50.80	1
44	88	2.100	53.34	2
46	92	2.200	55.88	1
48	96	2.300	58.42	2
50	100	2.400	60.96	1
52	104	2.500	63.50	2
54	108	2.600	66.04	1
56	112	2.700	68.58	2
58	116	2.800	71.12	1
60	120	2.900	73.66	2
62	124	3.000	76.20	1
64	128	3.100	78.74	2
66	132	3.200	81.28	1
68	136	3.300	83.82	2
70	140	3.400	86.36	1
72	144	3.500	88.90	2
74	148	3.600	91.44	1
76	152	3.700	93.98	2
78	156	3.800	96.52	1
80	160	3.900	99.06	2
82	164	4.000	101.60	1
84	168	4.100	104.14	2
86	172	4.200	106.68	1
88	176	4.300	109.22	2
90	180	4.400	111.76	1

MOUNTING STYLE		
H	MOUNTING HOLES	
S	SIDE MOUNTING HOLES	
I	#4-40 THREADED INSERTS	
A	#4-40 THREADED INSERTS IN SIDE HOLES	
Z	FLUSH EARS WITH SIDE MOUNTING HOLES	
D	FLUSH EARS WITH Ø.125 HOLES	
T	FLUSH EARS WITH #4-40 THREADED INSERTS	
V	FLUSH EARS WITH #4-40 THREADED INSERTS IN SIDE HOLES	
N	NO MOUNTING EARS	

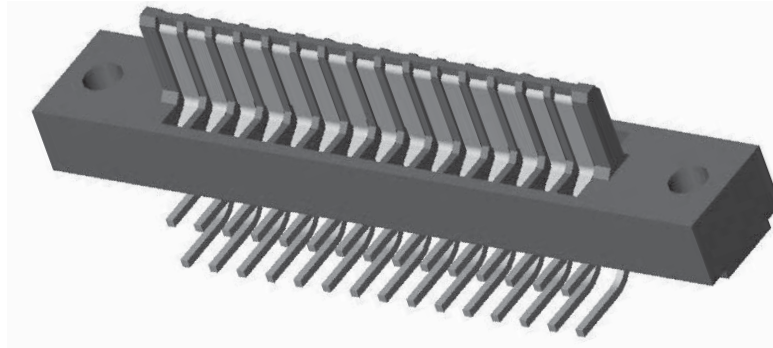
MODIFICATION CODE
(CONSULT FACTORY)
STAGGERED EARS WITH SIDE MOUNTING HOLES (S-S1075)
STAGGERED EARS WITH #4-40 THREADED INSERTS (A-S1076)



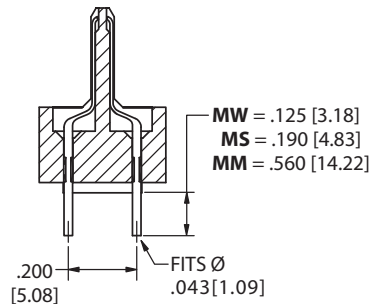
**.100" [2.54 mm] Contact Centers, .540" [13.72 mm] Insulator Height,
Male Edgecard, Dip Solder/Right Angle/Card Extender**

SPECIFICATIONS

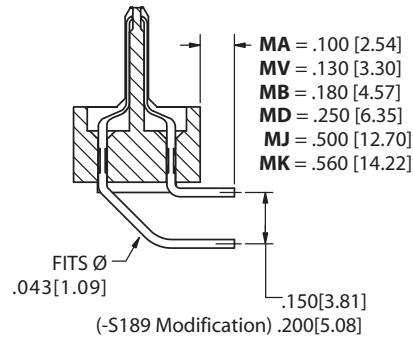
- Compatible with .431" or .610" Insulator Height Edgecards
- Mates in place of .062" [1.57] PCB
- PBT or PA9T insulator
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current
- Consult Factory for other Contact Centers



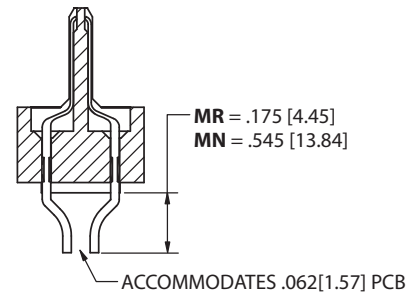
TERMINATION TYPE



**DIP SOLDER (MW, MS)
WIRE WRAP (MM)**

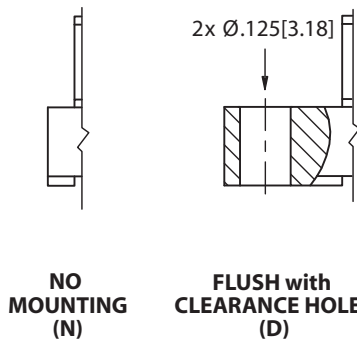


**RIGHT ANGLE
(MA, MV, MB, MD, MJ, MK)**

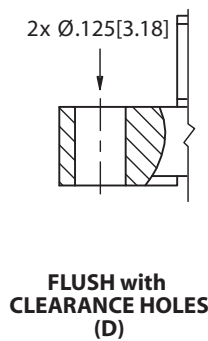


**CARD EXTENDER
(MR, MN)**

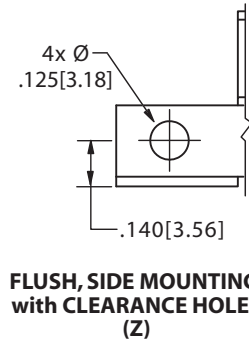
MOUNTING STYLE



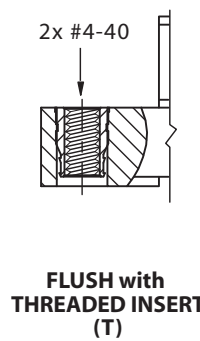
**NO
MOUNTING
(N)**



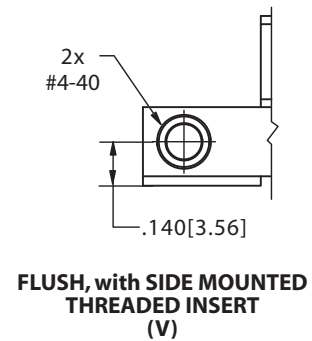
**FLUSH with
CLEARANCE HOLES
(D)**



**FLUSH, SIDE MOUNTING
with CLEARANCE HOLES
(Z)**



**FLUSH with
THREADED INSERT
(T)**



**FLUSH, with SIDE MOUNTED
THREADED INSERT
(V)**



**.100" [2.54 mm] Contact Centers, .540" [13.72 mm] Insulator Height,
Male Edgecard, Dip Solder/Right Angle/Card Extender**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze
Operating Temperature: -65°C to 125°C
Processing Temperature: 260°C for 10 seconds Max.
G = PA9T/Phosphor Bronze
Operating Temperature: -65°C to 150°C
Processing Temperature: 260°C for 120 seconds Max.

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface

- B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte
Y = .000030" Gold .000005" Gold

CONTACT CENTERS

C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS

04 thru 60 Positions (Contact Factory for Positions Not Shown)

E B C 25 M MW D - Sxxx

MODIFICATIONS (Consult Factory)

Omit for Standard
-S189 = .200" Row Spacing (Right Angle Only)

MOUNTING STYLE (Opposite Page)

- N = No Mounting
D = .250" Ears, Flush Mounting, .125" [3.18mm] Dia
Z = .250" Ears, Flush, Side Mounting
T = .250" Ears, Flush Mounting, #4-40 Threaded Insert
V = Flush, Side Mounting, #4-40 Threaded Insert

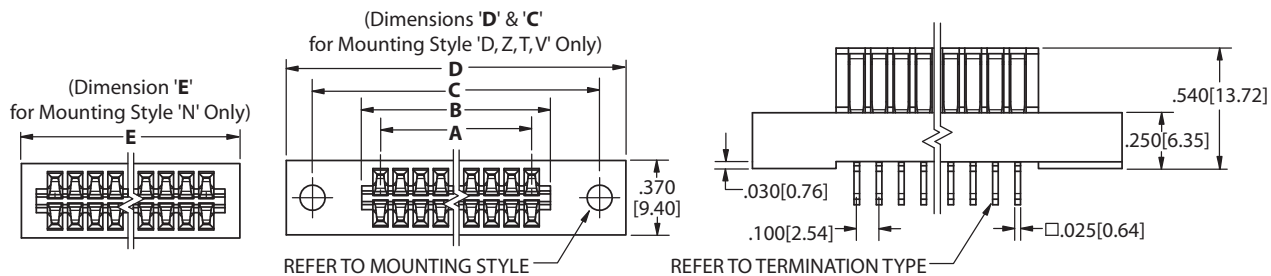
TERMINATION TYPE (Opposite Page)

- MW, MS = Dip Solder
MM = Wire Wrap
MA, MV, MB = Right Angle
MD, MJ, MK = Right Angle
MR, MN = Card Extender

M = Male Edgecard

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES					[MILLIMETERS]				
	A±.008	B±.008	C±.010	D±.020	E±.020 'N' Mtg. Only	A±0.20	B±0.20	C±0.25	D±0.51	E±0.51 'N' Mtg. Only
04/08	0.300	0.486	0.975	1.236	0.656	7.62	12.34	24.77	31.39	16.66
05/10	0.400	0.586	1.075	1.336	0.756	10.16	14.88	27.31	33.93	19.20
06/12	0.500	0.686	1.175	1.436	0.856	12.70	17.42	29.85	36.47	21.74
07/14*	0.600	0.786	1.275	1.536	0.956	15.24	19.96	32.39	39.01	24.28
08/16*	0.700	0.886	1.375	1.636	1.056	17.78	22.50	34.93	41.55	26.82
10/20	0.900	1.086	1.575	1.836	1.256	22.86	27.58	40.01	46.63	31.90
12/24	1.100	1.286	1.775	2.036	1.456	27.94	32.66	45.09	51.71	36.98
13/26	1.200	1.386	1.875	2.136	1.556	30.48	35.20	47.63	54.25	39.52
15/30	1.400	1.586	2.075	2.336	1.756	35.56	40.28	52.71	59.33	44.60
17/34	1.600	1.786	2.275	2.536	1.956	40.64	45.36	57.79	64.41	49.68
18/36	1.700	1.886	2.375	2.636	2.056	43.18	47.90	60.33	66.95	52.22
19/38	1.800	1.986	2.475	2.736	2.156	45.72	50.44	62.87	69.49	54.76
20/40	1.900	2.086	2.575	2.836	2.256	48.26	52.98	65.41	72.03	57.30
22/44	2.100	2.286	2.775	3.036	2.456	53.34	58.06	70.49	77.11	62.38
23/46	2.200	2.386	2.875	3.136	2.556	55.88	60.60	73.03	79.65	64.92
24/48	2.300	2.486	2.975	3.236	2.656	58.42	63.14	75.57	82.19	67.46
25/50	2.400	2.586	3.075	3.336	2.756	60.96	65.68	78.11	84.73	70.00
28/56	2.700	2.886	3.375	3.636	3.056	66.58	73.30	85.73	92.35	77.62
30/60	2.900	3.086	3.575	3.836	3.256	73.66	78.38	90.81	97.43	82.70
31/62	3.000	3.186	3.675	3.936	3.356	76.20	80.92	93.35	99.97	85.24
35/70	3.400	3.586	4.075	4.336	3.756	86.36	91.08	103.51	110.13	95.40
36/72	3.500	3.686	4.175	4.436	3.856	88.90	93.62	106.05	112.67	97.94
40/80	3.900	4.086	4.575	4.836	4.256	99.06	103.78	116.21	122.83	108.10
43/86	4.200	4.386	4.875	5.136	4.556	106.68	111.40	123.83	130.45	115.72
44/88	4.300	4.486	4.975	5.236	4.656	109.22	113.94	126.37	132.99	118.26
49/98	4.800	4.986	5.475	5.736	5.156	121.92	126.64	139.07	145.69	130.96
50/100	4.900	5.086	5.575	5.836	5.256	124.46	129.18	141.61	148.23	133.50
52/104	5.100	5.286	5.775	6.036	5.456	129.54	134.26	146.69	153.31	138.58
55/110	5.400	5.586	6.075	6.336	5.756	137.16	141.88	154.31	160.93	146.20
56/112†	5.500	5.686	6.175	6.436	5.856	139.70	144.42	156.85	163.47	148.74
57/114†	5.600	5.786	6.275	6.536	5.956	142.24	146.96	159.39	166.01	151.28
58/116†	5.700	5.886	6.375	6.636	6.056	144.78	149.50	161.93	168.55	153.82
59/118†	5.800	5.986	6.475	6.736	6.156	147.32	152.04	164.47	171.09	156.36
60/120†	5.900	6.086	6.575	6.836	6.256	149.86	154.58	167.01	173.63	158.90

*Consult factory for availability

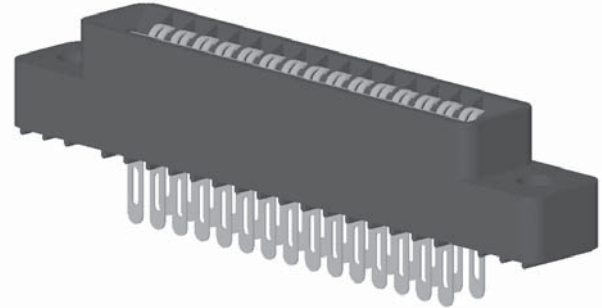
† Available in 'N' Mounting Only



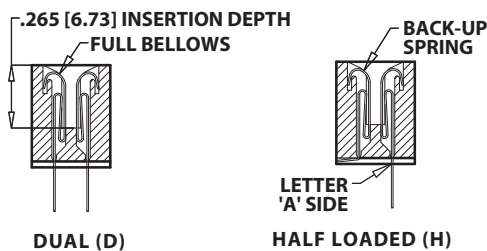
.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .062" [1.57] or .031" [0.79] Mating PCB

SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PBT, PPS, PA9T or PEEK insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

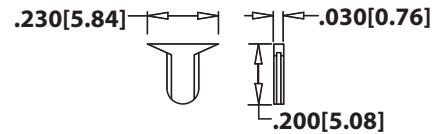


READOUT



POLARIZING KEYS (For .062" Mating PCB Only)

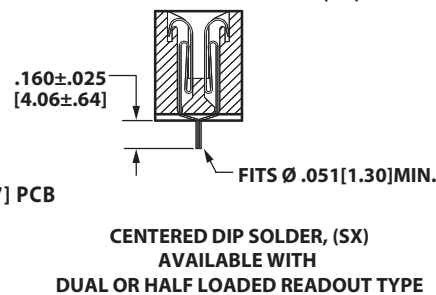
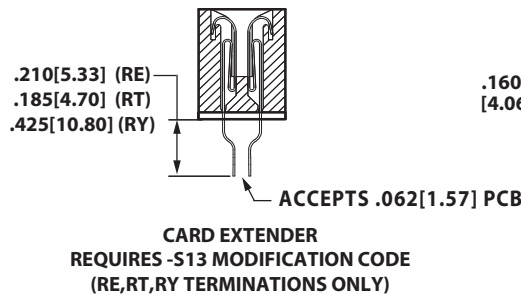
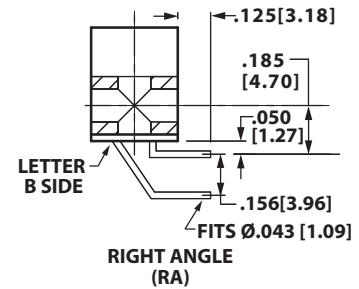
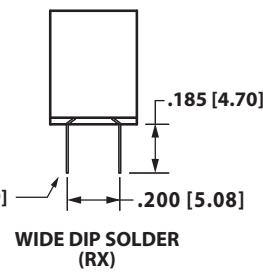
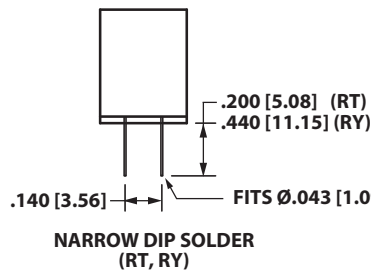
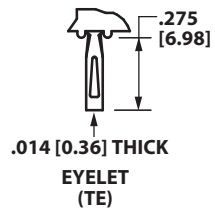
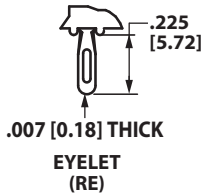
PLA-K1
KEY IN BETWEEN CONTACTS
(ORDER SEPARATELY)



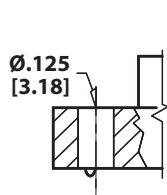
CONSULT FACTORY FOR MOLDED-IN KEY

TERMINATION TYPE

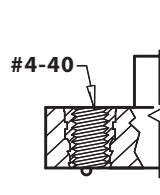
EYELET ACCEPTS
3-#26 AWG



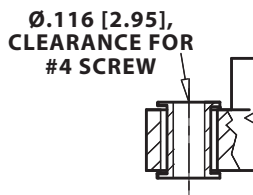
MOUNTING STYLE



CLEARANCE
HOLE (H)



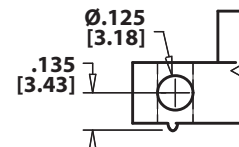
THREADED
INSERT (I)



FLOATING
BOBBIN (F)



NO MOUNTING
EARS (N)



SIDE MOUNTING
(S)



**.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .062" [1.57] or .031" [0.79] Mating PCB**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze (Standard)
- R = PPS/Phosphor Bronze
- G = PA9T/Phosphor bronze
- H = PBT/Beryllium Copper
- A = PPS/Beryllium Copper
- J = PA9T/Beryllium Copper
- *F = PPS/Spinodal (Overall Gold Plating Only)
Consult Factory for Special Soldering Guidelines
- *C = PPS/Beryllium Nickel (Overall Gold Plating Only)
- *W = PEEK/Beryllium Nickel (Overall Gold Plating Only)
*Consult Factory for availability.

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination
B =	.000010" Gold	.000100" Pure Tin, Matte
C =	.000030" Gold	.000100" Pure Tin, Matte
G =	.000010" Gold	.000005" Gold
Y =	.000030" Gold	.000005" Gold
	Contact Surface	Overall Plating
S =	.000010" Gold	.000010" Gold
M =	.000030" Gold	.000010" Gold
E =	.000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS

C = .100" [2.54mm]

E B C 43 D RE H - Sxxx

MODIFICATIONS (Consult Factory)

OMIT FOR STANDARD

-S13 = Card Extender Accepts .062" [1.57] PCB
(RE, RT, RY Terminations Only)

-S734 = .031" ± .008" [79 ± .20] Thick Mating PCB

MOUNTING STYLE (Opposite Page)

- H = .125" [3.18mm] Clearance Holes
- N = No Mounting
- S = Side Mounting
- I = Threaded Insert
- F = Floating Bobbin

TERMINATION TYPE (Opposite Page)

- RA = Right Angle
- RE = Eyelet (Standard)
- TE = Eyelet (Overall Plated Only)
- RT = .140" [3.56mm] x .200" [5.08mm] Dip Solder
- RY = .140" [3.56mm] x .440" [11.18mm] Dip Solder
- RX = .200" [5.08mm] x .185" [4.70mm] Dip Solder
- SX = .110" [2.79mm] Centered Dip Solder

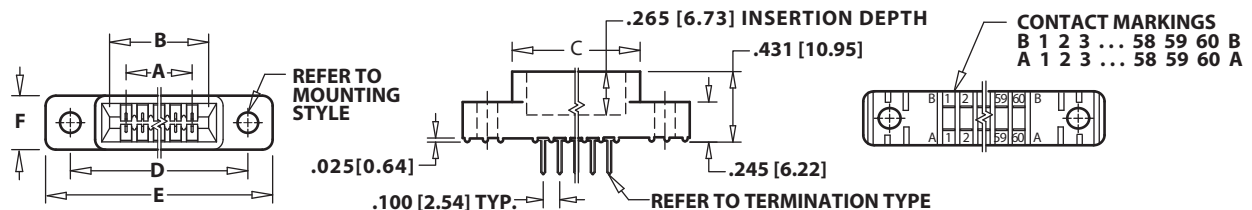
READOUT (Opposite Page)

- D = Dual
- H = Half Loaded

NUMBER OF CONTACT POSITIONS
See Chart Below

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential: Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
04/08*	0.300	0.500	0.675	0.975	1.275	0.330	7.62	12.70	17.15	24.77	32.39	8.38
05/10	0.400	0.600	0.775	1.075	1.375		10.16	15.24	19.69	27.31	34.93	
06/12	0.500	0.700	0.875	1.175	1.475		12.70	17.78	22.23	29.85	37.47	
07/14	0.600	0.800	0.975	1.275	1.575		15.24	20.32	24.77	32.39	40.01	
08/16	0.700	0.900	1.075	1.375	1.675		17.78	22.86	27.31	34.93	42.55	
10/20	0.900	1.100	1.275	1.575	1.875		22.86	27.94	32.39	40.01	47.63	
12/24	1.100	1.300	1.475	1.775	2.075		27.94	33.02	37.47	45.09	52.71	
13/26	1.200	1.400	1.575	1.875	2.175		30.48	35.56	40.01	47.63	55.25	
15/30	1.400	1.600	1.775	2.075	2.375		35.56	40.64	45.09	52.71	60.33	
17/34	1.600	1.800	1.975	2.275	2.575		40.64	45.72	50.17	57.79	65.41	
18/36	1.700	1.900	2.075	2.375	2.675		43.18	48.26	52.71	60.33	67.95	
19/38	1.800	2.000	2.175	2.475	2.775		45.72	50.80	55.25	62.87	70.49	
20/40	1.900	2.100	2.275	2.575	2.875		48.26	53.34	57.79	65.41	73.03	
22/44	2.100	2.300	2.475	2.775	3.075		53.34	58.42	62.87	70.49	78.11	
23/46*	2.200	2.400	2.575	2.875	3.175		55.88	60.96	65.41	73.03	80.65	
25/50	2.400	2.600	2.775	3.075	3.375		60.96	66.04	70.49	78.11	85.73	
26/52	2.500	2.700	2.875	3.175	3.475	0.400	63.50	68.58	73.03	80.65	88.27	10.16
28/56	2.700	2.900	3.075	3.375	3.675		68.58	73.66	78.11	85.73	93.35	
30/60	2.900	3.100	3.275	3.575	3.875		73.66	78.74	83.19	90.81	98.43	
31/62	3.000	3.200	3.375	3.675	3.975		76.20	81.28	85.73	93.35	100.97	
35/70	3.400	3.600	3.775	4.075	4.375		86.36	91.44	95.89	103.51	111.13	
36/72	3.500	3.700	3.875	4.175	4.475		88.90	93.98	98.43	106.05	113.67	
40/80	3.900	4.100	4.275	4.575	4.875		99.06	104.14	108.59	116.21	123.83	
43/86	4.200	4.400	4.575	4.875	5.175		106.68	111.76	116.21	123.83	131.45	
44/88	4.300	4.500	4.675	4.975	5.275		109.22	114.30	118.75	126.37	133.99	
49/98	4.800	5.000	5.175	5.475	5.775		121.92	127.00	131.45	139.07	146.69	
50/100	4.900	5.100	5.275	5.575	5.875		124.46	129.54	133.99	141.61	149.23	
52/104*	5.100	5.300	5.475	5.775	6.075		129.54	134.62	139.07	146.69	154.31	
60/120	5.900	6.100	6.275	6.575	6.875		149.86	154.94	159.39	167.01	174.63	
65/130	6.400	6.600	6.775	7.075	7.375		162.56	167.64	172.09	179.71	187.33	

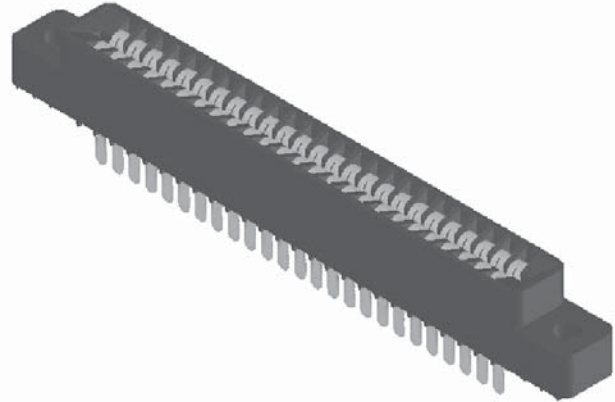
* Consult Factory For Availability



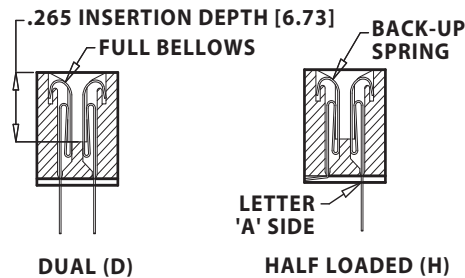
.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .093" [2.36] Mating PCB

SPECIFICATIONS

- Accommodates .093" $\pm$.008" [2.36 $\pm$.20] PC board
- PBT, PPS, PA9T, or PEEK insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current



READOUT

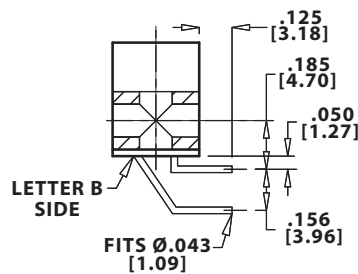


TERMINATION TYPE

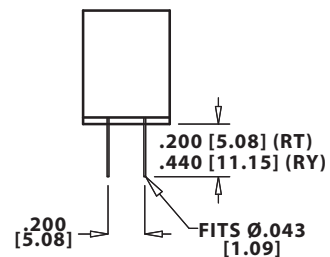
EYELET ACCEPTS 3-#26 AWG



EYELET
(RE)

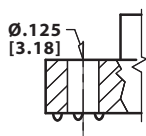


RIGHT ANGLE
(RA)

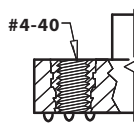


NARROW DIP SOLDER
(RT,RY)

MOUNTING STYLE



CLEARANCE
HOLE (H)



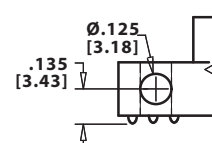
THREADED
INSERT (I)



FLOATING
BOBBIN (F)



NO MOUNTING EARS
(N)



SIDE MOUNTING
(S)



**.100" [2.54mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .093" [2.36] Mating PCB**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze (Standard)
- R = PPS/Phosphor Bronze
- G = PA9T/Phosphor bronze
- H = PBT/Beryllium Copper
- A = PPS/Beryllium Copper
- J = PA9T/Beryllium Copper
- *F = PPS/Spinodal (Overall Gold Plating Only)
- Consult Factory for Special Soldering Guidelines
- *C = PPS/Beryllium Nickel (Overall Gold Plating Only)
- *W = PEEK/Beryllium Nickel (Overall Gold Plating Only)
- *Consult Factory for availability.

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface		Termination	
B =	.000010" Gold	.000100" Pure Tin, Matte	
C =	.000030" Gold	.000100" Pure Tin, Matte	
G =	.000010" Gold	.000005" Gold	
Y =	.000030" Gold	.000005" Gold	
Contact Surface		Overall Plating	
S =	.000010" Gold	.000010" Gold	
M =	.000030" Gold	.000010" Gold	
E =	.000100" Pure Tin, Matte	.000100" Pure Tin, Matte	

E B C 43 D RE H - S93

MODIFICATION (CONSULT FACTORY)
-S93 = .093" ± .008" [2.36 ± .20] Thick PCB

MOUNTING STYLE (Opposite Page)
H = .125" [3.18mm] Clearance Holes
N = No Mounting
S = Side Mounting
I = Threaded Insert
F = Floating Bobbin

TERMINATION TYPE (Opposite Page)

RA = Right Angle
RE = Eyelet
RT = .200" [5.08mm] x .200" [5.08mm] Dip Solder
RY = .200" [5.08mm] x .440" [11.18mm] Dip Solder

READOUT (Opposite Page)

D = Dual
H = Half Loaded

NUMBER OF CONTACT POSITIONS

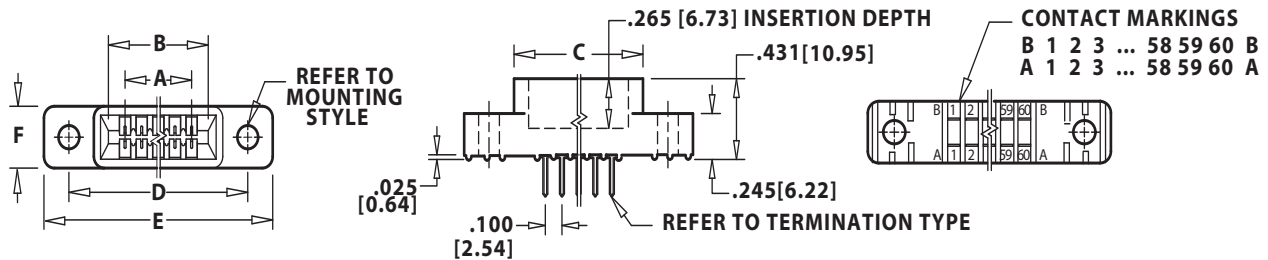
See Chart Below

CONTACT CENTERS

C = .100" [2.54mm]

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
04/08*	0.300	0.500	0.675	0.975	1.275	0.330	7.62	12.70	17.15	24.77	32.39	8.38
05/10	0.400	0.600	0.775	1.075	1.375		10.16	15.24	19.69	27.31	34.93	
06/12	0.500	0.700	0.875	1.175	1.475		12.70	17.78	22.23	29.85	37.47	
07/14	0.600	0.800	0.975	1.275	1.575		15.24	20.32	24.77	32.39	40.01	
08/16	0.700	0.900	1.075	1.375	1.675		17.78	22.86	27.31	34.93	42.55	
10/20	0.900	1.100	1.275	1.575	1.875		22.86	27.94	32.39	40.01	47.63	
12/24	1.100	1.300	1.475	1.775	2.075		27.94	33.02	37.47	45.09	52.71	
13/26	1.200	1.400	1.575	1.875	2.175		30.48	35.56	40.01	47.63	55.25	
15/30	1.400	1.600	1.775	2.075	2.375		35.56	40.64	45.09	52.71	60.33	
17/34	1.600	1.800	1.975	2.275	2.575		40.64	45.72	50.17	57.79	65.41	
18/36	1.700	1.900	2.075	2.375	2.675		43.18	48.26	52.71	60.33	67.95	
19/38	1.800	2.000	2.175	2.475	2.775		45.72	50.80	55.25	62.87	70.49	
20/40	1.900	2.100	2.275	2.575	2.875		48.26	53.34	57.79	65.41	73.03	
22/44	2.100	2.300	2.475	2.775	3.075		53.34	58.42	62.87	70.49	78.11	
23/46*	2.200	2.400	2.575	2.875	3.175		55.88	60.96	65.41	73.03	80.65	
25/50	2.400	2.600	2.775	3.075	3.375		60.96	66.04	70.49	78.11	85.73	
26/52	2.500	2.700	2.875	3.175	3.475		63.50	68.58	73.03	80.65	88.27	
28/56	2.700	2.900	3.075	3.375	3.675		68.58	73.66	78.11	85.73	93.35	
30/60	2.900	3.100	3.275	3.575	3.875		73.66	78.74	83.19	90.81	98.43	
31/62	3.000	3.200	3.375	3.675	3.975		76.20	81.28	85.73	93.35	100.97	
35/70	3.400	3.600	3.775	4.075	4.375	0.400	86.36	91.44	95.89	103.51	111.13	10.16
36/72	3.500	3.700	3.875	4.175	4.475		88.90	93.98	98.43	106.05	113.67	
40/80	3.900	4.100	4.275	4.575	4.875		99.06	104.14	108.59	116.21	123.83	
43/86	4.200	4.400	4.575	4.875	5.175		106.68	111.76	116.21	123.83	131.45	
44/88	4.300	4.500	4.675	4.975	5.275		109.22	114.30	118.75	126.37	133.99	
49/98	4.800	5.000	5.175	5.475	5.775		121.92	127.00	131.45	139.07	146.69	
50/100	4.900	5.100	5.275	5.575	5.875		124.46	129.54	133.99	141.61	149.23	
52/104*	5.100	5.300	5.475	5.775	6.075		129.54	134.62	139.07	146.69	154.31	
60/120	5.900	6.100	6.275	6.575	6.875		149.86	154.94	159.39	167.01	174.63	
65/125	6.400	6.600	6.775	7.075	7.375		162.56	167.64	172.09	179.71	187.33	

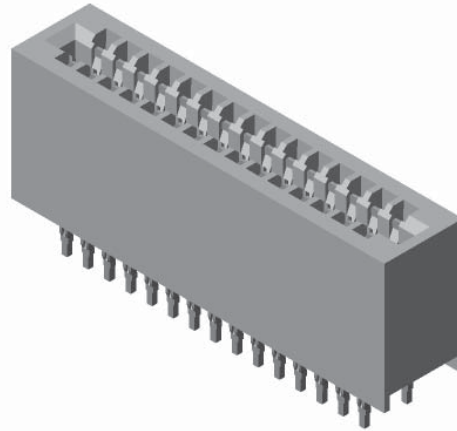
* Consult Factory For Availability



**.100" [2.54 mm] Contact Centers, .550" [13.97 mm] or .610" [15.49 mm] Profile
Press Fit**

SPECIFICATIONS

- Designed to meet specifications of Bellcore specification TR-TSY-00078.
- Flat rock installation eliminates the need for any special installation tool.
- Integrally molded scoops available to assist daughter card entry.
- Various insulator options per customer requirements, including:
 - Open ended on one side
 - Open ended on both sides to accommodate end to end mounting
 - Molded in keys per customer requirements.



FEATURES

COMPLIANT SECTION INSERTION FORCE

40 lbs maximum per contact

COMPLIANT SECTION WITHDRAWAL FORCE

10 lbs minimum per contact

HOLE SIZE REQUIREMENTS

Drilled Hole Diameter: $.0453" \pm .0010"$ [1.15 $\pm$.03]

Plating: $.001"$ [.03] to $.003"$ [.08] Copper and $.0003"$ [.01] Minimum Tin

FINISHED HOLE DIAMETER

$.040" \pm .003"$ [1.02 $\pm$.08]

SUITABLE FOR $.062"$ [1.57] DAUGHTER CARD

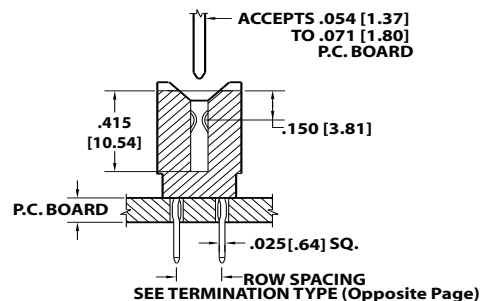
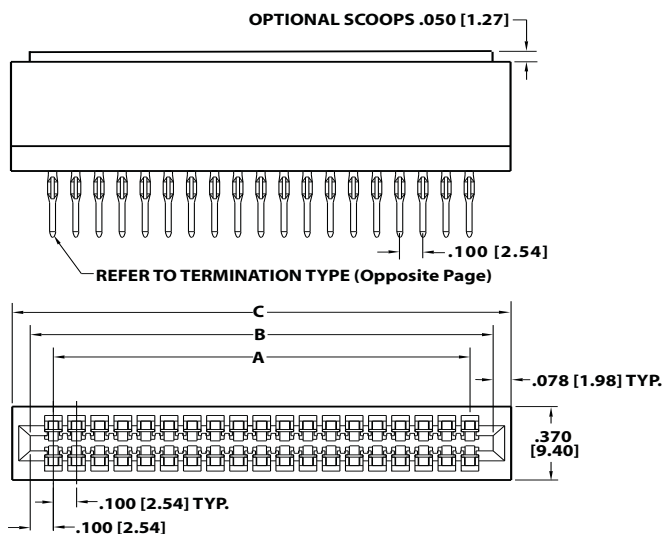
RECOMMENDED MOTHERBOARD THICKNESS

$.093"$ to $.125"$ [2.36 to 3.18]

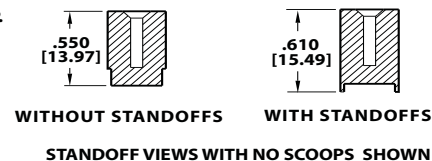
UL-CUL RECOGNIZED

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



-S1136 (WITH SCOOPS) SHOWN ABOVE





**.100" [2.54 mm] Contact Centers, .550" [13.97 mm] or .610" [15.49 mm] Profile
Press Fit**

PART NUMBER CODING

E C C 43 D JB N - Sxxx

MATERIALS (Insulator/Contact)
E = PBT/Phosphor Bronze

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate
Contact Surface Termination
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS
C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS
See Chart Below

READOUT
D = Dual

MODIFICATIONS (Consult Factory)
OMIT FOR STANDARD
Special Number assigned for specials such as:
- Scoops (-S1136)
- Other Card Slot Depths
- Slim Line Body (.315" [8.00mm])

MOUNTING STYLE
N = No Mounting
B = Open Card Slot

TERMINATION TYPE

	Standoffs	Row Spacing	Tail Length
JB =	No*	.200" [5.08mm]	.190" [4.83mm]
JC =	No*	.200" [5.08mm]	.625" [15.88mm]
JW =	Yes	.200" [5.08mm]	.190" [4.83mm]
JX =	Yes	.200" [5.08mm]	.565" [14.35mm]
JF =	No*	.100" [2.54mm]	.190" [4.83mm]
JG =	No*	.100" [2.54mm]	.625" [15.88mm]
JY =	Yes	.100" [2.54mm]	.190" [4.83mm]
JZ =	Yes	.100" [2.54mm]	.565" [14.35mm]

* Consult Factory For Availability

POSITIONS/ CONTACTS	A±.008[0.20]		B±.008[0.20]		C±.015[0.38]	
	INCH	[MM]	INCH	[MM]	INCH	[MM]
05/10	0.400	10.16	0.600	15.24	0.756	19.20
06/12	0.500	12.70	0.700	17.78	0.856	21.74
07/14	0.600	15.24	0.800	20.32	0.956	24.28
08/16*	0.700	17.78	0.900	22.86	1.056	26.82
09/18*	0.800	20.32	1.000	25.40	1.156	29.36
10/20	0.900	22.86	1.100	27.94	1.256	31.90
11/22	1.000	25.40	1.200	30.48	1.356	34.44
12/24	1.100	27.94	1.300	33.02	1.456	36.98
13/26	1.200	30.48	1.400	35.56	1.556	39.52
14/28*	1.300	33.02	1.500	38.10	1.656	42.06
15/30	1.400	35.56	1.600	40.64	1.756	44.60
16/32	1.500	38.10	1.700	43.18	1.856	47.14
17/34	1.600	40.64	1.800	45.72	1.956	49.68
18/36	1.700	43.18	1.900	48.26	2.056	52.22
19/38	1.800	45.72	2.000	50.80	2.156	54.76
20/40	1.900	48.26	2.100	53.34	2.256	57.30
21/42	2.000	50.80	2.200	55.88	2.356	59.84
22/44	2.100	53.34	2.300	58.42	2.456	62.38
23/46	2.200	55.88	2.400	60.96	2.556	64.92
24/48	2.300	58.42	2.500	63.50	2.656	67.46
25/50	2.400	60.96	2.600	66.04	2.756	70.00
26/52	2.500	63.50	2.700	68.58	2.856	72.54
27/54	2.600	66.04	2.800	71.12	2.956	75.08
28/56	2.700	68.58	2.900	73.66	3.056	77.62
29/58	2.800	71.12	3.000	76.20	3.156	80.16
30/60	2.900	73.66	3.100	78.74	3.256	82.70
31/62	3.000	76.20	3.200	81.28	3.356	85.24
32/64	3.100	78.74	3.300	83.82	3.456	87.78

POSITIONS/ CONTACTS	A±.008[0.20]		B±.008[0.20]		C±.015[0.38]	
	INCH	[MM]	INCH	[MM]	INCH	[MM]
33/66	3.200	81.28	3.400	86.36	3.556	90.32
34/68	3.300	83.82	3.500	88.90	3.656	92.86
35/70	3.400	86.36	3.600	91.44	3.756	95.40
36/72	3.500	88.90	3.700	93.98	3.856	97.94
37/74	3.600	91.44	3.800	96.52	3.956	100.48
38/76	3.700	93.98	3.900	99.06	4.056	103.02
39/78	3.800	96.52	4.000	101.60	4.156	105.56
40/80	3.900	99.06	4.100	104.14	4.256	108.10
41/82	4.000	101.60	4.200	106.68	4.356	110.64
42/84	4.100	104.14	4.300	109.22	4.456	113.18
43/86	4.200	106.68	4.400	111.76	4.556	115.72
44/88	4.300	109.22	4.500	114.30	4.656	118.26
45/90	4.400	111.76	4.600	116.84	4.756	120.80
46/92	4.500	114.30	4.700	119.38	4.856	123.34
47/94	4.600	116.84	4.800	121.92	4.956	125.88
48/96	4.700	119.38	4.900	124.46	5.056	128.42
49/98	4.800	121.92	5.000	127.00	5.156	130.96
50/100	4.900	124.46	5.100	129.54	5.256	133.50
51/102	5.000	127.00	5.200	132.08	5.356	136.04
52/104	5.100	129.54	5.300	134.62	5.456	138.58
53/106	5.200	132.08	5.400	137.16	5.556	141.12
54/108	5.300	134.62	5.500	139.70	5.656	143.66
55/110	5.400	137.16	5.600	142.24	5.756	146.20
56/112	5.500	139.70	5.700	144.78	5.856	148.74
57/114	5.600	142.24	5.800	147.32	5.956	151.28
58/116	5.700	144.78	5.900	149.86	6.056	153.82
59/118	5.800	147.32	6.000	152.40	6.156	156.36
60/120	5.900	149.86	6.100	154.94	6.256	158.90

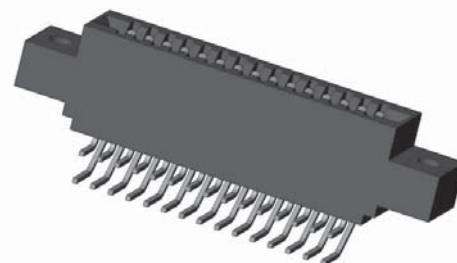
* Consult Factory For Availability



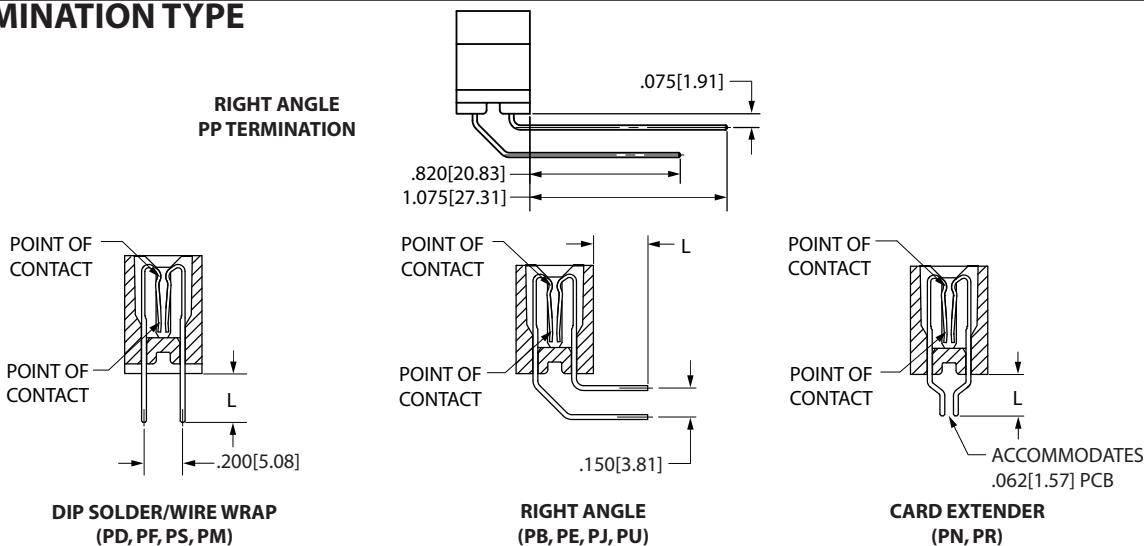
**.100" [2.54 mm] Contact Centers, .560" [14.22 mm] Profile, .400" [10.16 mm] Wide Body,
Double Point Contact, Dip Solder/Wire Wrap/Right Angle/Card Extender**

SPECIFICATIONS

- Accommodates .062" $\pm$.008 [1.57 $\pm$.20] PC board
- PPS, PBT or PA9T insulator
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current
- UL Flammability Rating: 94V-0



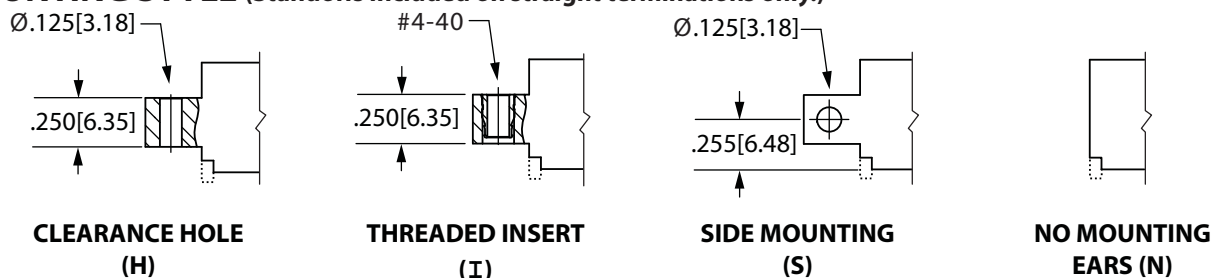
TERMINATION TYPE



TERMINATION	TERMINATION TYPE	* POST LENGTH L $\pm$.025 [.64]	FITS MIN. HOLE SIZE	STANDOFF
PD	DIP SOLDER	.160 [4.06]	.043 [1.09]	YES
PS	DIP SOLDER	.190 [4.83]	.043 [1.09]	YES
PF	DIP SOLDER	.270 [6.86]	.043 [1.09]	YES
PM	WIRE WRAP	.560 [14.22]	.043 [1.09]	YES
PB	RIGHT ANGLE	.100 [2.54]	.043 [1.09]	NO
PG	RIGHT ANGLE	.140 [3.56]	.043 [1.09]	NO
PE	RIGHT ANGLE	.180 [4.57]	.043 [1.09]	NO
PU	RIGHT ANGLE	.250 [6.35]	.043 [1.09]	NO
PJ	RIGHT ANGLE	.500 [12.70]	.043 [1.09]	NO
PP	RIGHT ANGLE	SEE ABOVE	.043 [1.09]	NO
PN	CARD EXTENDER	.225 [5.73]	N/A	NO
PR	CARD EXTENDER	.595 [15.12]	N/A	NO

* OTHER POST LENGTHS AVAILABLE, CONTACT FACTORY.

MOUNTING STYLE (Standoffs included on straight terminations only.)





.100" [2.54 mm] Contact Centers, .560" [14.22 mm] Profile, .400" [10.16 mm] Wide Body, Double Point Contact, Dip Solder/Wire Wrap/Right Angle/Card Extender

PART NUMBER CODING

MATERIALS (Insulator /Contact)

E = PBT/Phosphor Bronze
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
H = PBT/Beryllium Copper
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface **Termination**
B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS

C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS

See Chart Below

E B C 10 D PD H - Sxxx

MODIFICATION CODE (Consult Factory)

OMIT FOR STANDARD

MOUNTING STYLE (Opposite Page)

H = Clearance Holes
I = Threaded Inserts
S = Side Mounting
N = No Mounting

TERMINATION TYPE (Opposite Page)

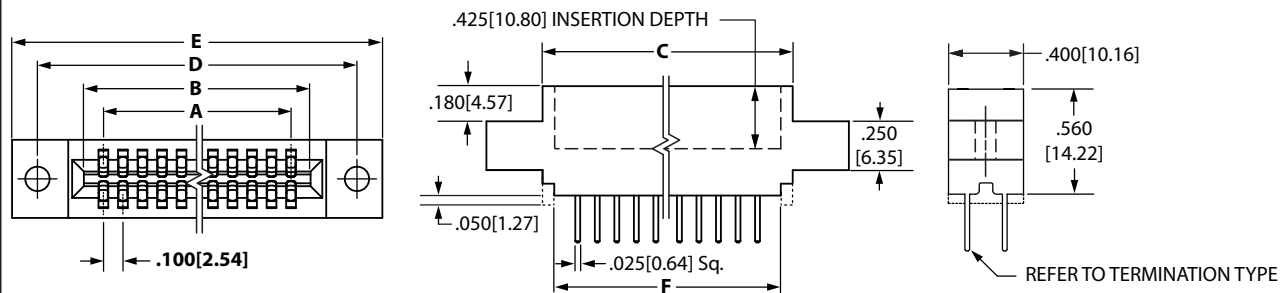
PD, PF, PS = .025" [.64] Square Dip Solder
PM = .025" [.64] Square Wire Wrap
PB, PG, PE, PJ, PU, PP = .025" [.64mm] Square Right Angle
PN, PR = .025" [.64mm] Square Card Extender

READOUT (Opposite Page)

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



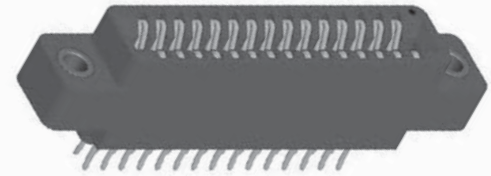
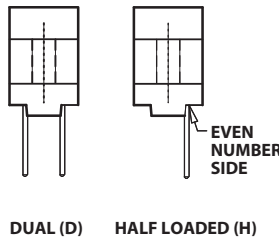
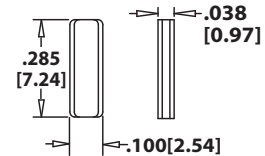
Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.740	12.70	17.78	21.84	29.85	36.45	18.80
07/14*	0.600	0.800	0.960	1.275	1.535	0.840	15.24	20.32	24.38	32.39	38.99	21.34
08/16	0.700	0.900	1.060	1.375	1.635	0.940	17.78	22.86	26.92	34.93	41.53	23.88
10/20	0.900	1.100	1.260	1.575	1.835	1.140	22.86	27.94	32.00	40.01	46.61	28.96
12/24	1.100	1.300	1.460	1.775	2.035	1.340	27.94	33.02	37.08	45.09	51.69	34.04
13/26	1.200	1.400	1.560	1.875	2.135	1.440	30.48	35.56	39.62	47.63	54.23	36.58
15/30	1.400	1.600	1.760	2.075	2.335	1.640	35.56	40.64	44.70	52.71	59.31	41.66
17/34	1.600	1.800	1.960	2.275	2.535	1.840	40.64	45.72	49.78	57.79	64.39	46.74
18/36	1.700	1.900	2.060	2.375	2.635	1.940	43.18	48.26	52.32	60.33	66.93	49.28
20/40	1.900	2.100	2.260	2.575	2.835	2.140	48.26	53.34	57.40	65.41	72.01	54.36
22/44	2.100	2.300	2.460	2.775	3.035	2.340	53.34	58.42	62.48	70.49	77.09	59.44
24/48	2.300	2.500	2.660	2.975	3.235	2.540	58.42	63.50	67.56	75.57	82.17	64.52
25/50	2.400	2.600	2.760	3.075	3.335	2.640	60.96	66.04	70.10	78.11	84.71	67.06
28/56	2.700	2.900	3.060	3.375	3.635	2.940	68.58	73.66	77.72	85.73	92.33	74.68
30/60	2.900	3.100	3.260	3.575	3.835	3.140	73.66	78.74	82.80	90.81	97.41	79.76
31/62	3.000	3.200	3.360	3.675	3.935	3.240	76.20	81.28	85.34	93.35	99.95	82.30
35/70	3.400	3.600	3.760	4.075	4.335	3.640	86.36	91.44	95.50	103.51	110.11	92.46
36/72	3.500	3.700	3.860	4.175	4.435	3.740	88.90	93.98	98.04	106.05	112.65	95.00
40/80	3.900	4.100	4.260	4.575	4.835	4.140	99.06	104.14	108.20	116.21	122.81	105.16
43/86	4.200	4.400	4.560	4.875	5.135	4.440	106.68	111.76	115.82	123.83	130.43	112.78
44/88	4.300	4.500	4.660	4.975	5.235	4.540	109.22	114.30	118.36	126.37	132.97	115.32
49/98*	4.800	5.000	5.160	5.475	5.735	5.040	121.92	127.00	131.06	139.07	145.67	128.02
50/100	4.900	5.100	5.260	5.575	5.835	5.140	124.46	129.54	133.60	141.61	148.21	130.56
55/110	5.400	5.600	5.760	6.075	6.335	5.640	137.16	142.24	146.30	154.31	160.91	143.26
60/120	5.900	6.100	6.260	6.575	6.835	6.140	149.86	154.94	159.00	167.01	173.61	155.96
61/122	6.000	6.200	6.360	6.675	6.935	6.240	152.40	157.48	161.54	169.55	176.15	158.50
65/130	6.400	6.600	6.760	7.075	7.335	6.640	162.56	167.64	171.70	179.71	186.31	168.66
70/140	6.900	7.100	7.260	7.575	7.835	7.140	175.26	180.34	184.40	192.41	199.01	181.36

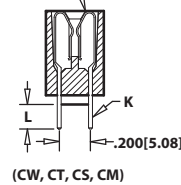
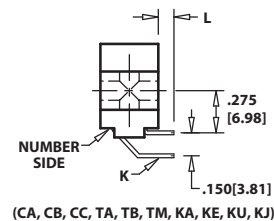
* Consult factory for availability.

**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height**
Dip Solder/Wire Wrap/Right Angle/Card Extender**SPECIFICATIONS**

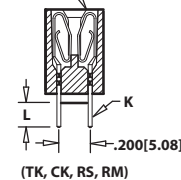
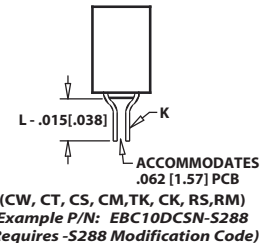
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board (For .093" $\pm$.008" [2.36 $\pm$.20] PCB see page 40-41, 42-43; for .125" $\pm$.008" [3.18 $\pm$.20] PCB see page 40-41)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

**READOUT****POLARIZING KEY****PLC-K1****KEY IN BETWEEN CONTACTS
(ORDER SEPARATELY)****TERMINATION TYPE**

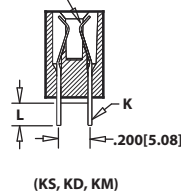
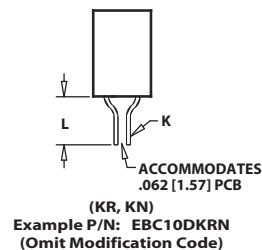
HAIRPIN BELLOWS	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
CW	DIP SOLDER	.015 x .025 [.38 x .64]	.125 [3.18]	.035 [0.76]
CT	DIP SOLDER	.015 x .025 [.38 x .64]	.170 [4.32]	.035 [0.76]
CS	DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.040 [1.02]
CM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
CA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
CB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
CC	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

HAIRPIN BELLOWS**RIGHT ANGLE**

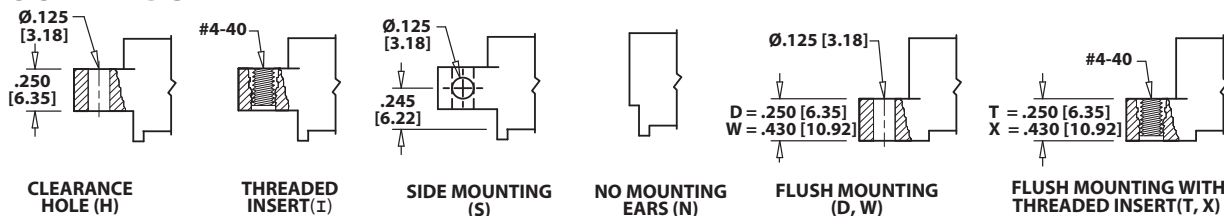
LOOP BELLOWS	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
TK,CK	DIP SOLDER	.026 [.66] ROUND	.190 [4.83]	.030 [0.76]
RS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
RM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
TA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
TB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
TM	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

LOOP BELLOWS**HAIRPIN or LOOP CARD EXTENDER**

CANTILEVER	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
KS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
KD	DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.043 [1.09]
KM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
*KA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
*KE	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
*KU	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]
*KJ	RIGHT ANGLE	.025 [.64] SQUARE	.500 [12.70]	.043 [1.09]
*KR	CARD EXTENDER	.025 [.64] SQUARE	.235 [5.97]	N/A
*KN	CARD EXTENDER	.025 [.64] SQUARE	.605 [15.37]	N/A

CANTILEVER**CANTILEVER CARD EXTENDER**

* KA, KE, KJ, KR, KN have no standoffs, unless requested.

MOUNTING STYLE



**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height
Dip Solder/Wire Wrap/Right Angle/Card Extender**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze (Standard)
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
H = PBT/Beryllium Copper
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte
G = .000010" Gold	.000005" Gold
Y = .000030" Gold	.000005" Gold
Contact Surface	Overall Plating
S = .000010" Gold	.000010" Gold
M = .000030" Gold	.000010" Gold
E = .000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS

C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS

See Chart Below

READOUT (Opposite Page)

D = Dual
H = Half Loaded

E B C 70 D CM H - Sxxx

MODIFICATION CODE (Consult Factory)

OMIT FORT STANDARD

-S189 = .200" [5.08mm] Row to Row on Right Angle

-S288* = Card Extender Accepts .062" [1.57] PCB

* Not Required on KR or KN Terminations

MOUNTING STYLE (Opposite Page)

H = Clearance Holes
I = Threaded Inserts
S = Side Mounting
N = No Mounting
D,W = Flush Mounting
T,X = Flush Mounting With Threaded Inserts

TERMINATION TYPE (Opposite Page)

Hairpin Bellows - Available with B or C plating and Phosphor Bronze Only

CS = .025" [.64mm] Square Dip Solder
CM = .025 [.64mm] Square Wire Wrap
CA, CB, CC = .025" [.64mm] Square Right Angle
CW, CT = .015" x .025" [.38 x .64] Dip Solder

Loop Bellows

RS = .025" [.64mm] Square Dip Solder
CK, TK = .026" [.66mm] Round Dip Solder
RM = .025" [.64mm] Square Wire Wrap
TA, TB, TM = .025" [.64mm] Square Right Angle

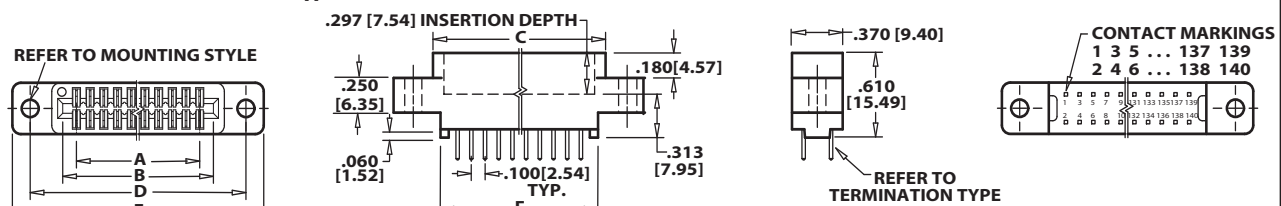
Cantilever Bellows - Available in Y, B, or C plating Only

Not Available with R or A Materials

KS, KD = .025" [.64mm] Square Dip Solder
KM = .025 [.64mm] Square Wire Wrap
KA, KE, KU, KJ = .025" [.64mm] Square Right Angle
KR, KN = .025" [.64mm] Square Card Extender

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.750	12.70	17.78	21.84	29.85	36.45	19.05
07/14*	0.600	0.800	0.960	1.275	1.535	0.850	15.24	20.32	24.38	32.39	38.99	21.59
08/16	0.700	0.900	1.060	1.375	1.635	0.950	17.78	22.86	26.92	34.93	41.53	24.13
10/20	0.900	1.100	1.260	1.575	1.835	1.150	22.86	27.94	32.00	40.01	46.61	29.21
12/24	1.100	1.300	1.460	1.775	2.035	1.350	27.94	33.02	37.08	45.09	51.69	34.29
13/26	1.200	1.400	1.560	1.875	2.135	1.450	30.48	35.56	39.62	47.63	54.23	36.83
15/30	1.400	1.600	1.760	2.075	2.335	1.650	35.56	40.64	44.70	52.71	59.31	41.91
17/34	1.600	1.800	1.960	2.275	2.535	1.850	40.64	45.72	49.78	57.79	64.39	46.99
18/36	1.700	1.900	2.060	2.375	2.635	1.950	43.18	48.26	52.32	60.33	66.93	49.53
20/40	1.900	2.100	2.260	2.575	2.835	2.150	48.26	53.34	57.40	65.41	72.01	54.61
22/44	2.100	2.300	2.460	2.775	3.035	2.350	53.34	58.42	62.48	70.49	77.09	59.69
24/48	2.300	2.500	2.660	2.975	3.235	2.550	58.42	63.50	67.56	75.57	82.17	64.77
25/50	2.400	2.600	2.760	3.075	3.335	2.650	60.96	66.04	70.10	78.11	84.71	67.31
28/56	2.700	2.900	3.060	3.375	3.635	2.950	68.58	73.66	77.72	85.73	92.33	74.93
30/60	2.900	3.100	3.260	3.575	3.835	3.150	73.66	78.74	82.80	90.81	97.41	80.01
31/62	3.000	3.200	3.360	3.675	3.935	3.250	76.20	81.28	85.34	93.35	99.95	82.55
35/70	3.400	3.600	3.760	4.075	4.335	3.650	86.36	91.44	95.50	103.51	110.11	92.71
36/72	3.500	3.700	3.860	4.175	4.435	3.750	88.90	93.98	98.04	106.05	112.65	95.25
40/80	3.900	4.100	4.260	4.575	4.835	4.150	99.06	104.14	108.20	116.21	122.81	105.41
43/86	4.200	4.400	4.560	4.875	5.135	4.450	106.68	111.76	115.82	123.83	130.43	113.03
44/88	4.300	4.500	4.660	4.975	5.235	4.550	109.22	114.30	118.36	126.37	132.97	115.57
49/98*	4.800	5.000	5.160	5.475	5.735	5.050	121.92	127.00	131.06	139.07	145.67	128.27
50/100	4.900	5.100	5.260	5.575	5.835	5.150	124.46	129.54	133.60	141.61	148.21	130.81
55/110	5.400	5.600	5.760	6.075	6.335	5.650	137.16	142.24	146.30	154.31	160.91	143.51
60/120	5.900	6.100	6.260	6.575	6.835	6.150	149.86	154.94	159.00	167.01	173.61	156.21
61/122	6.000	6.200	6.360	6.675	6.935	6.250	152.40	157.48	161.54	169.55	176.15	158.75
65/130	6.400	6.600	6.760	7.075	7.335	6.650	162.56	167.64	171.70	179.71	186.31	168.91
70/140	6.900	7.100	7.260	7.575	7.835	7.150	175.26	180.34	184.40	192.41	199.01	181.61
80/160*	7.900	8.100	8.260	8.575	8.835	8.150	200.66	205.74	209.80	217.81	224.41	207.01
90/180*	8.900	9.100	9.260	9.575	9.835	9.150	226.06	231.14	235.20	243.21	249.81	232.41
100/200*	9.900	10.100	10.260	10.575	10.835	10.150	251.46	256.54	260.60	268.61	275.21	257.81

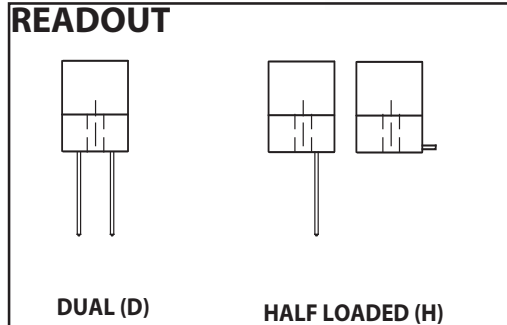
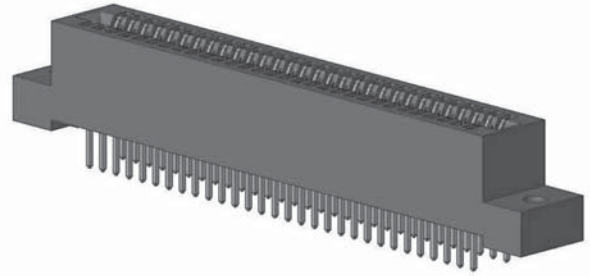
* Consult factory for availability.



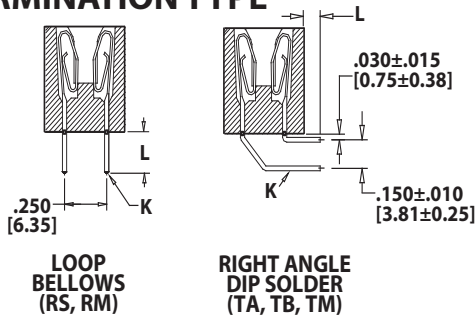
**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/
Wire Wrap/Right Angle/Card Extender for .093" [2.36] or .125" [3.18] Mating PCB**

SPECIFICATIONS

- Accommodates .093" $\pm$.008" [2.36 $\pm$.20] or .125" $\pm$.008" [3.18 $\pm$.20] mating PC board (Consult factory for .031" $\pm$.008" [.79 $\pm$.20] boards)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

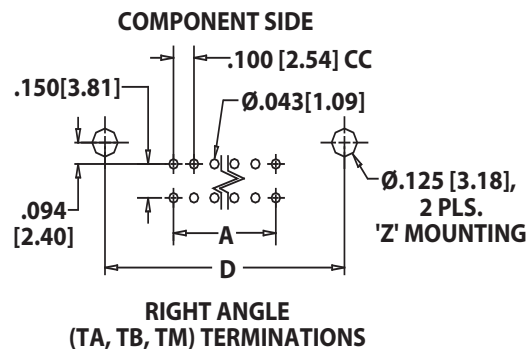
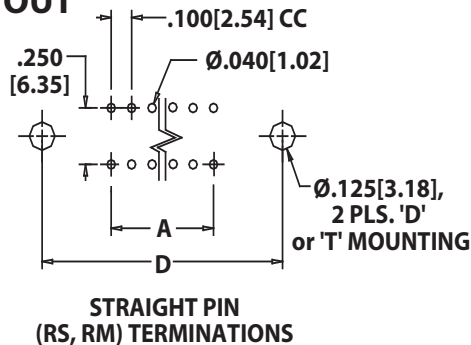


TERMINATION TYPE

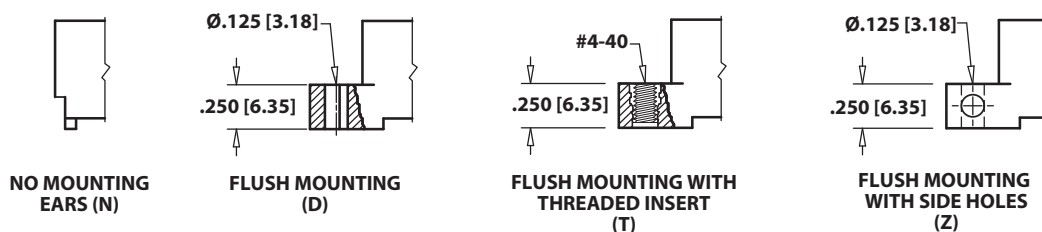


TERMINATION TYPE		POST CROSS SECTION (K)	POST LENGTH L $\pm$.025 [.64]	FITS MIN. HOLE SIZE
RS	Dip Solder	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
RM	Wire Wrap	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
TA	Right Angle	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
TB	Right Angle	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
TM	Right Angle	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

PCB LAYOUT



MOUNTING STYLE





**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/
Wire Wrap/Right Angle/Card Extender for .093" [2.36] or .125" [3.18] Mating PCB**

PART NUMBER CODING

MATERIALS (Insulator /Contact)

E = PBT/Phosphor Bronze
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
H = PBT/Beryllium Copper
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface

B = .000010" Gold
C = .000030" Gold
G = .000010" Gold
Y = .000030" Gold

Termination

.000100" Pure Tin, Matte
.000100" Pure Tin, Matte
.000005" Gold
.000005" Gold

Contact Surface

S = .000010" Gold
M = .000030" Gold
E = .000100" Pure Tin, Matte

Overall Plating

.000010" Gold
.000010" Gold
.000100" Pure Tin, Matte

E B C 70 D RM D - S273

MODIFICATION CODE (Consult Factory)

-S273 = FOR .093" ± .008" [2.36 ± .20]
THICK MATING PCB
-S664 = FOR .125" ± .008" [3.18 ± .20]
THICK MATING PCB

MOUNTING STYLE (Opposite Page)

N = No Mounting
D = Flush Mounting
T = Flush Mounting With Threaded Inserts
Z = Flush Mounting With Side Holes

TERMINATION TYPE (Opposite Page)

RS = .025" [0.64mm] Square Dip Solder
RM = .025" [0.64mm] Square Wire Wrap
TA, TB, TM = .025" [0.64mm] Square Right Angle

READOUT (Opposite Page)

D = Dual
H = Half Loaded

NUMBER OF CONTACT POSITIONS

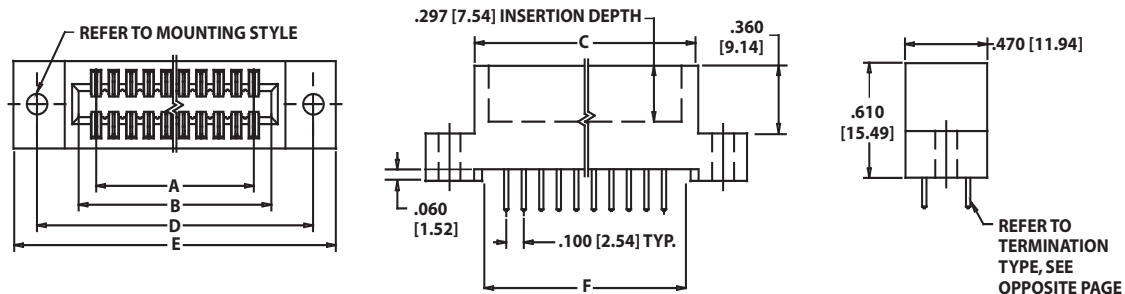
See Chart Below

CONTACT CENTERS

C = .100" [2.54mm]

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.750	12.70	17.78	21.84	29.85	36.45	19.05
07/14*	0.600	0.800	0.960	1.275	1.535	0.850	15.24	20.32	24.38	32.39	38.99	21.59
08/16*	0.700	0.900	1.060	1.375	1.635	0.950	17.78	22.86	26.92	34.93	41.53	24.13
10/20	0.900	1.100	1.260	1.575	1.835	1.150	22.86	27.94	32.00	40.01	46.61	29.21
12/24	1.100	1.300	1.460	1.775	2.035	1.350	27.94	33.02	37.08	45.09	51.69	34.29
15/30*	1.400	1.600	1.760	2.075	2.335	1.650	35.56	40.64	44.70	52.71	59.31	41.91
17/34*	1.600	1.800	1.960	2.275	2.535	1.850	40.64	45.72	49.78	57.79	64.39	46.99
18/36	1.700	1.900	2.060	2.375	2.635	1.950	43.18	48.26	52.32	60.33	66.93	49.53
20/40*	1.900	2.100	2.260	2.575	2.835	2.150	48.26	53.34	57.40	65.41	72.01	54.61
22/44	2.100	2.300	2.460	2.775	3.035	2.350	53.34	58.42	62.48	70.49	77.09	59.69
24/48*	2.300	2.500	2.660	2.975	3.235	2.550	58.42	63.50	67.56	75.57	82.17	64.77
25/50*	2.400	2.600	2.760	3.075	3.335	2.650	60.96	66.04	70.10	78.11	84.71	67.31
28/56*	2.700	2.900	3.060	3.375	3.635	2.950	68.58	73.66	77.72	85.73	92.33	74.93
30/60	2.900	3.100	3.260	3.575	3.835	3.150	73.66	78.74	82.80	90.81	97.41	80.01
31/62*	3.000	3.200	3.360	3.675	3.935	3.250	76.20	81.28	85.34	93.35	99.95	82.55
35/70	3.400	3.600	3.760	4.075	4.335	3.650	86.36	91.44	95.50	103.51	110.11	92.71
36/72	3.500	3.700	3.860	4.175	4.435	3.750	88.90	93.98	98.04	106.05	112.65	95.25
40/80*	3.900	4.100	4.260	4.575	4.835	4.150	99.06	104.14	108.20	116.21	122.81	105.41
43/86*	4.200	4.400	4.560	4.875	5.135	4.450	106.68	111.76	115.82	123.83	130.43	113.03
44/88*	4.300	4.500	4.660	4.975	5.235	4.550	109.22	114.30	118.36	126.37	132.97	115.57
49/98*	4.800	5.000	5.160	5.475	5.735	5.050	121.92	127.00	131.06	139.07	145.67	128.27
50/100	4.900	5.100	5.260	5.575	5.835	5.150	124.46	129.54	133.60	141.61	148.21	130.81
55/110	5.400	5.600	5.760	6.075	6.335	5.650	137.16	142.24	146.30	154.31	160.91	143.51
60/120*	5.900	6.100	6.260	6.575	6.835	6.150	149.86	154.94	159.00	167.01	173.61	156.21
61/122	6.000	6.200	6.360	6.675	6.935	6.250	152.40	157.48	161.54	169.55	176.15	158.75
65/130*	6.400	6.600	6.760	7.075	7.335	6.650	162.56	167.64	171.70	179.71	186.31	168.91
70/140	6.900	7.100	7.260	7.575	7.835	7.150	175.26	180.34	184.40	192.41	199.01	181.61

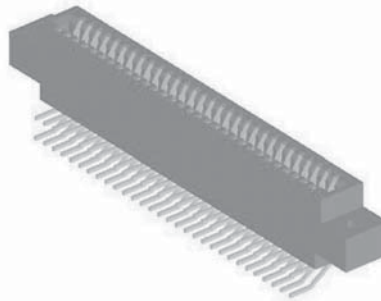
* Consult factory for availability.



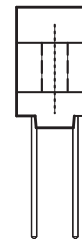
**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Profile, .400" [10.16 mm] Wide Body
for .062" or .093" Mating PCB, Dip Solder/Wire Wrap/Right Angle/Card Extender**

SPECIFICATIONS

- Accommodates .062" $\pm$.008 [1.57 $\pm$.20] or .093" $\pm$.008" [2.36 $\pm$.20] PC board
- PPS, PBT or PA9T insulator
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

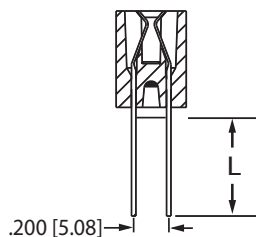


READOUT

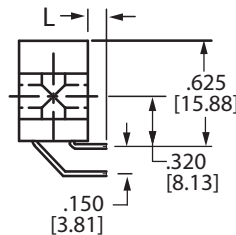


DUAL (D)

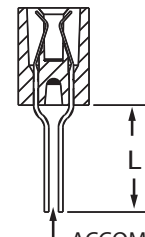
TERMINATION TYPE



DIP SOLDER/WIRE WRAP
(KS, KD, KM)



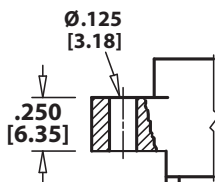
RIGHT ANGLE
(KA, KE, KU, KJ)



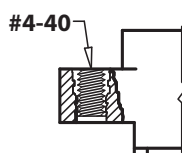
CARD EXTENDER
(KR, KN)

TERMINATION	TERMINATION TYPE	POST LENGTH L $\pm$.025 [.64]	FITS MIN. HOLE SIZE	STANDOFF
KD	DIP SOLDER	.160 [4.06]	.043 [1.09]	YES
KS	DIP SOLDER	.190 [4.83]	.040 [1.02]	YES
KM	WIRE WRAP	.560 [14.22]	.040 [1.02]	YES
KA	RIGHT ANGLE	.100 [2.54]	.043 [1.09]	NO
KE	RIGHT ANGLE	.180 [4.57]	.043 [1.09]	NO
KU	RIGHT ANGLE	.250 [6.35]	.043 [1.09]	NO
KJ	RIGHT ANGLE	.500 [12.70]	.043 [1.09]	NO
KR	CARD EXTENDER	.235 [5.97]	N/A	NO
KN	CARD EXTENDER	.605 [15.37]	N/A	NO

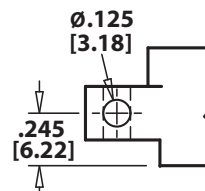
MOUNTING STYLE



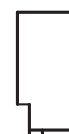
CLEARANCE
HOLE (H)



THREADED
INSERT (I)



SIDE MOUNTING
(S)



NO MOUNTING
EARS (N)

.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Profile, .400" [10.16 mm] Wide Body for .062" or .093" Mating PCB, Dip Solder/Wire Wrap/Right Angle/Card Extender

PART NUMBER CODING

MATERIALS (Insulator /Contact)

E = PBT/Phosphor Bronze
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
H = PBT/Beryllium Copper
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate
Contact Surface Termination

B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte
Y = .000030" Gold .000005" Gold

CONTACT CENTERS

C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS

See Chart Below

A B C 30 D KE H - S1191

MODIFICATION CODE (Consult Factory)

-S1243 = For .062" ± .008 [1.57" ± .20] PCB

-S1191 = For .093" ± .008" [2.36 ± .20] PCB

MOUNTING STYLE (Opposite Page)

H = Clearance Holes
I = Threaded Inserts
S = Side Mounting
N = No Mounting

TERMINATION TYPE (Opposite Page)

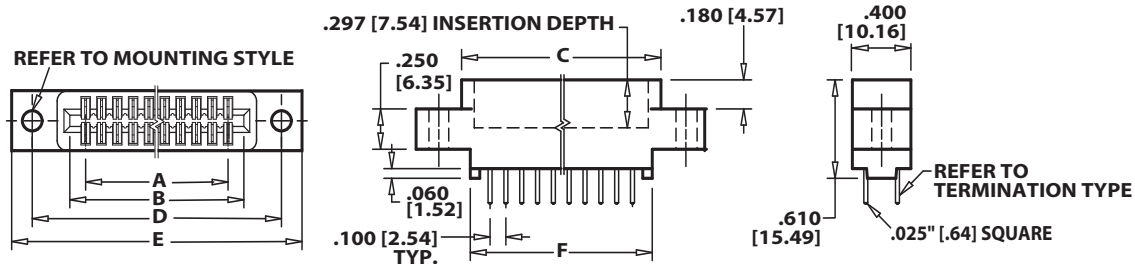
KD, KS = .025" [.64] Square Dip Solder
KM = .025" [.64] Square Wire Wrap
KA, KE, KU, KJ = .025" [.64mm] Square Right Angle
KN, KR = .025" [.64mm] Square Card Extender

READOUT (Opposite Page)

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



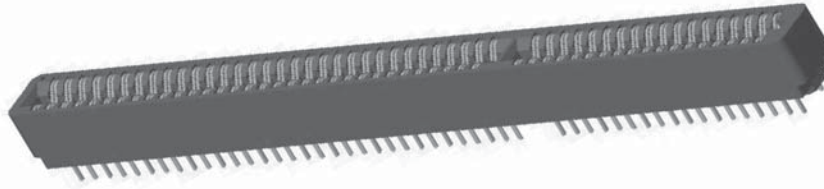
Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.012	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.30	C±0.38	D±0.25	E±0.51	F±0.38
06/12*	0.500	0.700	0.860	1.175	1.435	0.742	12.70	17.78	21.84	29.85	36.45	18.85
07/14*	0.600	0.800	0.960	1.275	1.535	0.842	15.24	20.32	24.38	32.39	38.99	21.39
08/16*	0.700	0.900	1.060	1.375	1.635	0.942	17.78	22.86	26.92	34.93	41.53	23.93
10/20*	0.900	1.100	1.260	1.575	1.835	1.142	22.86	27.94	32.00	40.01	46.61	29.01
12/24*	1.100	1.300	1.460	1.775	2.035	1.342	27.94	33.02	37.08	45.09	51.69	34.09
13/26*	1.200	1.400	1.560	1.875	2.135	1.442	30.48	35.56	39.62	47.63	54.23	36.63
15/30*	1.400	1.600	1.760	2.075	2.335	1.642	35.56	40.64	44.70	52.71	59.31	41.71
17/34*	1.600	1.800	1.960	2.275	2.535	1.842	40.64	45.72	49.78	57.79	64.39	46.79
18/36*	1.700	1.900	2.060	2.375	2.635	1.942	43.18	48.26	52.32	60.33	66.93	49.33
20/40	1.900	2.100	2.260	2.575	2.835	2.142	48.26	53.34	57.40	65.41	72.01	54.41
22/44	2.100	2.300	2.460	2.775	3.035	2.342	53.34	58.42	62.48	70.49	77.09	59.49
24/48*	2.300	2.500	2.660	2.975	3.235	2.542	58.42	63.50	67.56	75.57	82.17	64.57
25/50*	2.400	2.600	2.760	3.075	3.335	2.642	60.96	66.04	70.10	78.11	84.71	67.11
28/56*	2.700	2.900	3.060	3.375	3.635	2.942	68.58	73.66	77.72	85.73	92.33	74.73
30/60	2.900	3.100	3.260	3.575	3.835	3.142	73.66	78.74	82.80	90.81	97.41	79.81
31/62*	3.000	3.200	3.360	3.675	3.935	3.242	76.20	81.28	85.34	93.35	99.95	82.35
35/70*	3.400	3.600	3.760	4.075	4.335	3.642	86.36	91.44	95.50	103.51	110.11	92.51
36/72*	3.500	3.700	3.860	4.175	4.435	3.742	88.90	93.98	98.04	106.05	112.65	95.05
40/80*	3.900	4.100	4.260	4.575	4.835	4.142	99.06	104.14	108.20	116.21	122.81	105.21
43/86	4.200	4.400	4.560	4.875	5.135	4.442	106.68	111.76	115.82	123.83	130.43	112.83
44/88*	4.300	4.500	4.660	4.975	5.235	4.542	109.22	114.30	118.36	126.37	132.97	115.37
49/98*	4.800	5.000	5.160	5.475	5.735	5.042	121.92	127.00	131.06	139.07	145.67	128.07
50/100	4.900	5.100	5.260	5.575	5.835	5.142	124.46	129.54	133.60	141.61	148.21	130.61
55/110	5.400	5.600	5.760	6.075	6.335	5.642	137.16	142.24	146.30	154.31	160.91	143.31
60/120*	5.900	6.100	6.260	6.575	6.835	6.142	149.86	154.94	159.00	167.01	173.61	156.01
61/122*	6.000	6.200	6.360	6.675	6.935	6.242	152.40	157.48	161.54	169.55	176.15	158.55
65/130*	6.400	6.600	6.760	7.075	7.335	6.642	162.56	167.64	171.70	179.71	186.31	168.71
70/140	6.900	7.100	7.260	7.575	7.835	7.142	175.26	180.34	184.40	192.41	199.01	181.41

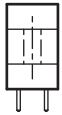
* Consult Factory For Availability



**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
[ISA] Dip Solder/Wire Wrap/Right Angle**



READOUT



DUAL (D)



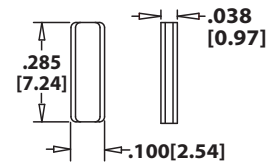
HALF LOADED (H)

SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PBT or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

POLARIZING KEY

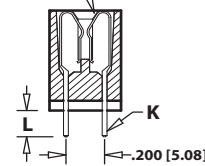
PLC-K1



**KEY IN BETWEEN CONTACTS
(ORDER SEPARATELY)**

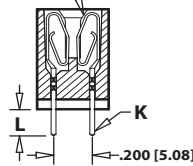
TERMINATION TYPE

HAIRPIN BELLOWS

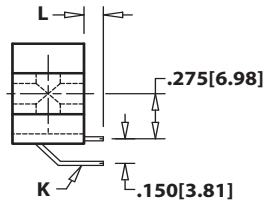


HAIRPIN BELLOWS
(CS,CM,CW,CT)

LOOP BELLOWS



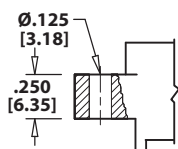
LOOP BELLOWS
(TK,RS,RM)



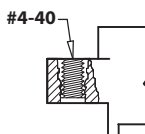
RIGHT ANGLE, DIP SOLDER
(CA,CB,CC,TA,TB,TM)
-S605 MODIFICATION

HAIRPIN BELLOWS	LOOP	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
CM	TK, CK	DIP SOLDER	.026 [.66] ROUND	.190 [4.83]	.030 [0.76]
	RS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
	RM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
	TA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
CB	TB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
CC	TM	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]
CW		DIP SOLDER	.015 X .025 [.38 X .64]	.125 [3.18]	.035 [0.76]
CT		DIP SOLDER	.015 X .025 [.38 X .64]	.170 [4.32]	.035 [0.76]
CS		DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.040 [1.02]

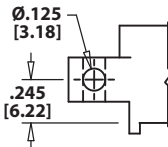
MOUNTING STYLE



CLEARANCE HOLE (H)



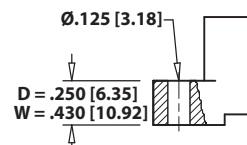
THREADED INSERT (I)



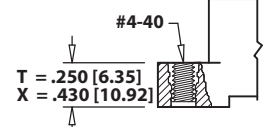
SIDE MOUNTING (S)



NO MOUNTING EARS (N)



FLUSH MOUNTING (D, W)



FLUSH MOUNTING WITH THREADED INSERT (T, X)



**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
[ISA] Dip Solder/Wire Wrap/Right Angle**

PART NUMBER CODING

E B C 49 D CW N - S420

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze (Standard)
- G = PA9T/Phosphor Bronze
- H = PBT/Beryllium Copper
- J = PA9T/Beryllium Copper
- (Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination
B =	.000010" Gold	.000100" Pure Tin, Matte
C =	.000030" Gold	.000100" Pure Tin, Matte
G =	.000010" Gold	.000005" Gold
Y =	.000030" Gold	.000005" Gold
	Contact Surface	Overall Plating
S =	.000010" Gold	.000010" Gold
M =	.000030" Gold	.000010" Gold
E =	.000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS

C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS

18, 31 or 49 (31/18)

READOUT (Opposite page)

- D = Dual
- H = Half Loaded

MODIFICATION CODE (Consult Factory)

ISA WITH RETENTION FEATURE

- S524 = 18 Positions
- S524 = 31 Positions
- S518 = 49 Positions (31/18)

ISA WITHOUT RETENTION FEATURE

- S371 = 18 Positions
- S371 = 31 Positions
- S420 = 49 Positions (31/18) Dip Solder or Wire Wrap
- S605 = 49 Positions (31/18) Right Angle

MOUNTING STYLE (Opposite Page)

- H = Clearance Holes
- I = Threaded Inserts
- S = Side Mounting
- N = No Mounting
- D,W = Flush Mounting
- T,X = Flush Mounting With Threaded Inserts

TERMINATION TYPE (Opposite Page)

Hairpin Bellows *

- CS = .025" [0.64mm] Square Dip Solder
- CM = .025" [0.64mm] Square Wire Wrap
- CA, CB, CC = .025" [0.64mm] Square Right Angle
- CW, CT = .015" [0.38mm] x .025" [0.64mm] Dip Solder

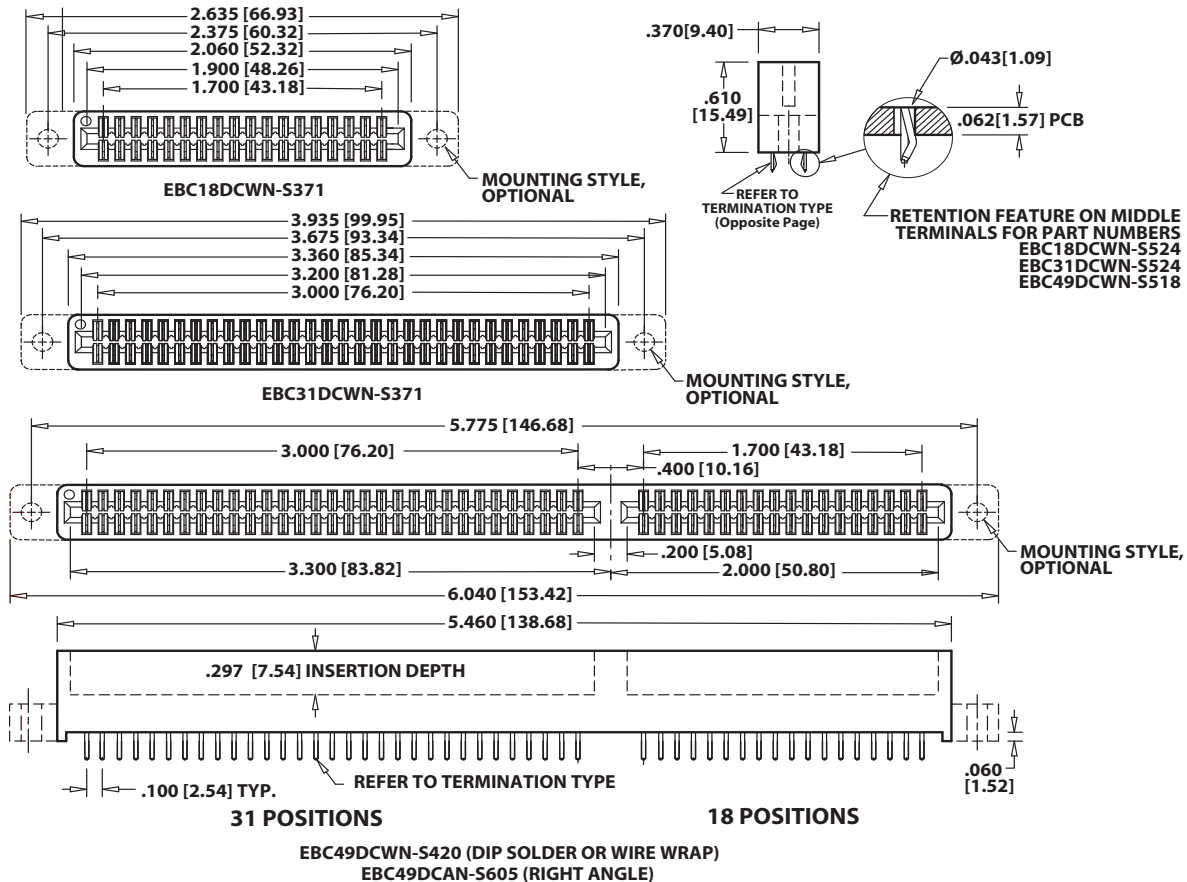
Loop Bellows

- RS = .025" [0.64mm] Square Dip Solder
- TK = .026" [0.66mm] Round Dip Solder
- RM = .025" [0.64mm] Square Wire Wrap
- TA, TB, TM = .025" [0.64mm] Square Right Angle

* Available in B or C Plating and Phosphor Bronze only
Consult Factory for Cantilever Terminations

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

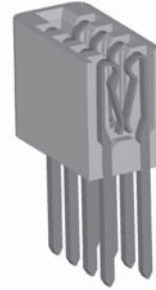




.100" [2.54 mm] Contact Centers, .690" [17.52 mm] Insulator Height
Make Before Break Dip Solder/Card Extender/Right Angle

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$.20] PC board
- PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current



READOUT



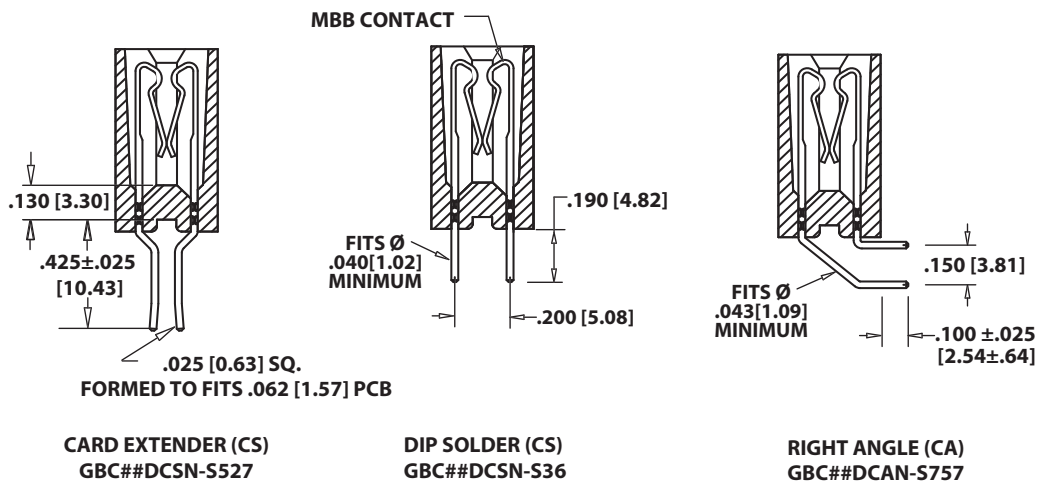
DUAL (D)

MOUNTING STYLE



NO MOUNTING EARS (N)

TERMINATION TYPE





.100" [2.54 mm] Contact Centers, .690" [17.52 mm] Insulator Height
Make Before Break Dip Solder/Card Extender/Right Angle

PART NUMBER CODING

G B C 10 D CS N - S36

MATERIALS (INSULATOR/CONTACT)
G = PA9T/Phosphor Bronze
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate
Contact Surface Termination
B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte

CONTACT CENTERS
C = .100" [2.54mm]

NUMBER OF CONTACT POSITIONS
See Chart Below

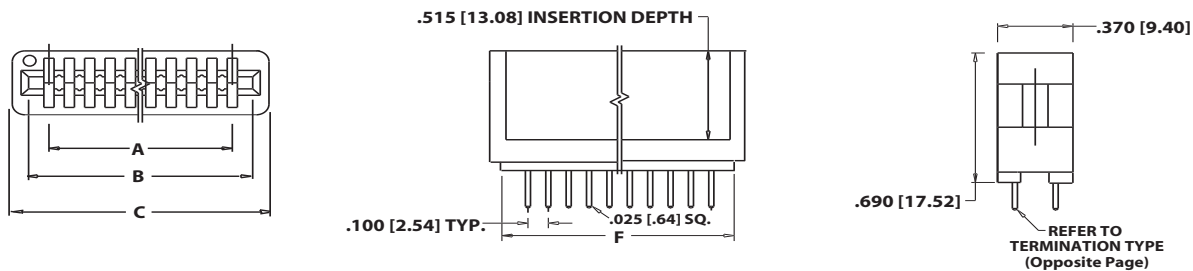
MODIFICATION CODE (Consult Factory)
-S757 = MBB, .150" [3.81mm] Row to Row on Right Angle
-S527 = MBB, Card Extender Accepts .062" [1.57] PCB
-S36 = MBB, Straight Dip-Solder

MOUNTING STYLE
N = No Mounting

TERMINATION TYPE (Opposite Page)
Hairpin Bellows
CS = Dip Solder .025" [.64] Square
CA = Right Angle, .100" [2.54]

READOUT (Opposite Page)
D = Dual

DIMENSIONS Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES				[MILLIMETERS]			
	A±.008	B±.008	C±.015	F±.015	A±0.20	B±0.20	C±0.38	F±0.38
02/04*	0.100	0.300	0.460	0.350	2.54	7.62	11.68	8.89
04/08*	0.300	0.500	0.660	0.550	7.62	12.70	16.76	13.97
06/12*	0.500	0.700	0.860	0.750	12.70	17.78	21.84	19.05
08/16*	0.700	0.900	1.060	0.950	17.78	22.86	26.92	24.13
10/20*	0.900	1.100	1.260	1.150	22.86	27.94	32.00	29.21
12/24	1.100	1.300	1.460	1.350	27.94	33.02	37.08	34.29
14/28	1.300	1.500	1.660	1.550	33.02	38.10	42.16	39.37
16/32*	1.500	1.700	1.860	1.750	38.10	43.18	47.24	44.45
18/36*	1.700	1.900	2.060	1.950	43.18	48.26	52.32	49.53
20/40*	1.900	2.100	2.260	2.150	48.26	53.34	57.40	54.61
22/44*	2.100	2.300	2.460	2.350	53.34	58.42	62.48	59.69
24/48*	2.300	2.500	2.660	2.550	58.42	63.50	67.56	64.77
26/52*	2.500	2.700	2.860	2.750	63.50	68.58	72.64	69.85
28/56*	2.700	2.900	3.060	2.950	68.58	73.66	77.72	74.93
30/60*	2.900	3.100	3.260	3.150	73.66	78.74	82.80	80.01
32/64*	3.100	3.300	3.460	3.350	78.74	83.82	87.88	85.09
34/68*	3.300	3.500	3.660	3.550	83.82	88.90	92.96	90.17
36/72*	3.500	3.700	3.860	3.750	88.90	93.98	98.04	95.25
38/76*	3.700	3.900	4.060	3.950	93.98	99.06	103.12	100.33
40/80*	3.900	4.100	4.260	4.150	99.06	104.14	108.20	105.41
42/84*	4.100	4.300	4.460	4.350	104.14	109.22	113.28	110.49
44/88*	4.300	4.500	4.660	4.550	109.22	114.30	118.36	115.57
46/92*	4.500	4.700	4.860	4.750	114.30	119.38	123.44	120.65
48/96*	4.700	4.900	5.060	4.950	119.38	124.46	128.52	125.73
50/100	4.900	5.100	5.260	5.150	124.46	129.54	133.60	130.81

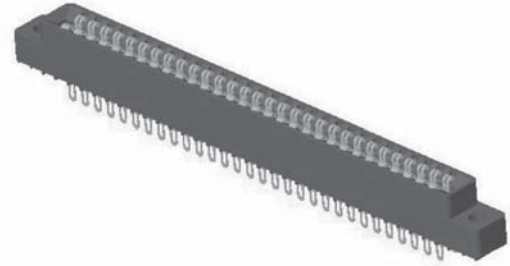
* Consult factory for availability.



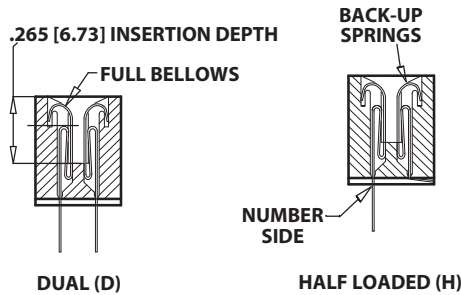
.125" [3.18 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .062" [1.57] or .031" [0.79] Mating PCB

SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
 (Consult factory for .031" $\pm$.008" [.79 $\pm$.20],
 .093" $\pm$.008" [2.36 $\pm$.20] and .125" $\pm$.008"
 [3.18 $\pm$.20] boards)
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

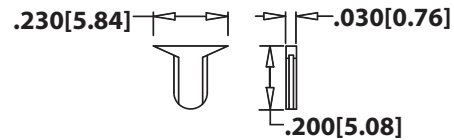


READOUT



POLARIZING KEY

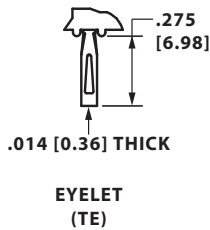
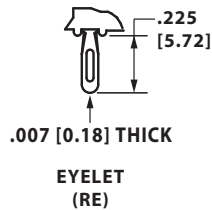
PLA-K1
KEY IN BETWEEN CONTACTS
(ORDER SEPARATELY)



CONSULT FACTORY FOR MOLDED-IN KEY

TERMINATION TYPE

EYELET ACCEPTS
3-#26 AWG



.200 [5.08] (RT)
.440 [11.15] (RY)

NARROW DIP SOLDER
(RT, RY)

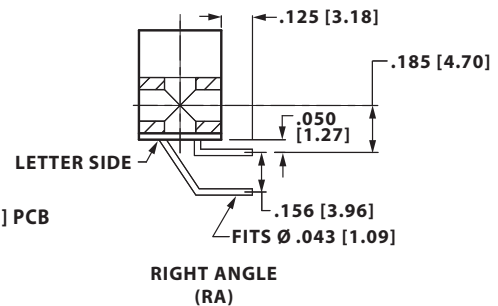
.210 [5.33] (RE)
.185 [4.70] (RT)
.425 [10.80] (RY)

CARD EXTENDER
REQUIRES -S13 MODIFICATION CODE
(RE, RT, RY TERMINATIONS ONLY)

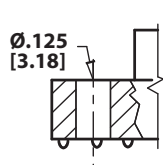
ACCEPTS .062 [1.57] PCB

.165 [4.19] (RJ)
.185 [4.70] (RX)

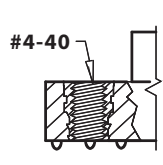
WIDE DIP SOLDER
(RJ, RX)



MOUNTING STYLE



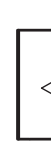
CLEARANCE HOLE (H)



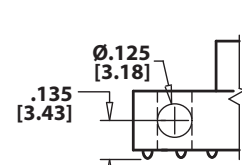
THREADED INSERT (I)



FLOATING BOBBIN (F)



NO MOUNTING EARS (N)



SIDE MOUNTING (S)



.125" [3.18 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle for .062" [1.57] or .031" [0.79] Mating PCB

PART NUMBER CODING

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze (Standard)
- R = PPS/Phosphor Bronze
- G = PA9T/Phosphor bronze
- H = PBT/Beryllium Copper
- A = PPS/Beryllium Copper
- J = PA9T/Beryllium Copper
- *F = PPS/Spinodal (Overall Gold Plating Only)
Consult Factory for Special Soldering Guidelines
- *C = PPS/Beryllium Nickel (Overall Gold Plating Only)
- *W = PEEK/Beryllium Nickel (Overall Gold Plating Only)
*Consult Factory for availability.

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination	Overall Plating
B	.000010" Gold	.000100" Pure Tin, Matte	
C	.000030" Gold	.000100" Pure Tin, Matte	
G	.000010" Gold	.000005" Gold	
Y	.000030" Gold	.000005" Gold	
S	.000010" Gold	.000010" Gold	
M	.000030" Gold	.000010" Gold	
E	.000100" Pure Tin, Matte	.000100" Pure Tin, Matte	

MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD

- S13 = Card Extender Accepts .062" [1.57] PCB (RE, RT, RY Terminations Only)
- S734 = .031" ± .008" [.79 ± .20] Thick PCB

MOUNTING STYLE (Opposite Page)

- H = .125" [3.18mm] Clearance Holes
- N = No Mounting
- S = Side Mounting
- I = Threaded Insert
- F = Floating Bobbin

TERMINATION TYPE (Opposite Page)

- RA = Right Angle
- RE = Eyelet (Standard)
- TE = Eyelet (Overall Plated Only)
- RT = .140" [3.56mm] x .200" [5.08mm] Dip Solder
- RY = .140" [3.56mm] x .440" [11.18mm] Dip Solder
- RX = .200" [5.08mm] x .185" [4.70mm] Dip Solder
- RJ = .250" [6.35mm] x .165" [4.19mm] Dip Solder

READOUT (Opposite Page)

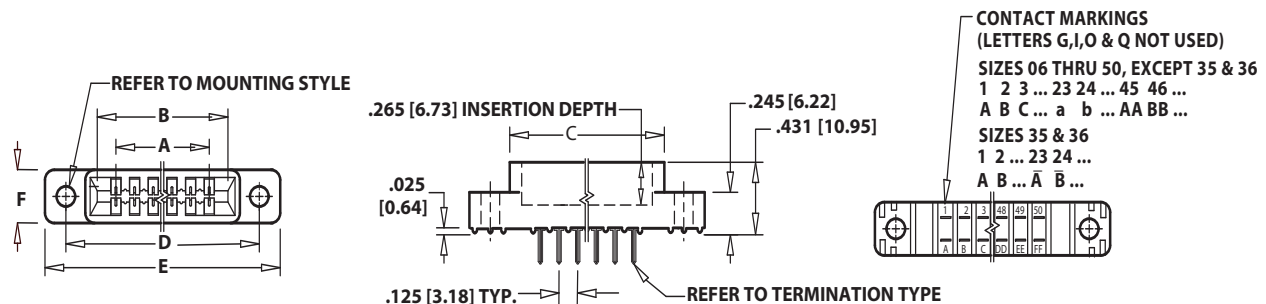
- D = Dual
- H = Half Loaded

NUMBER OF CONTACT POSITIONS
See Chart Below

CONTACT CENTERS
A = .125" [3.18mm]

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

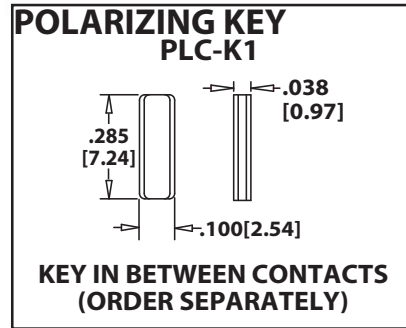
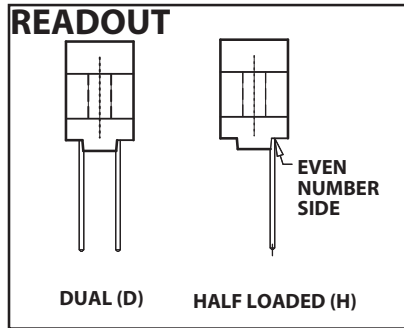
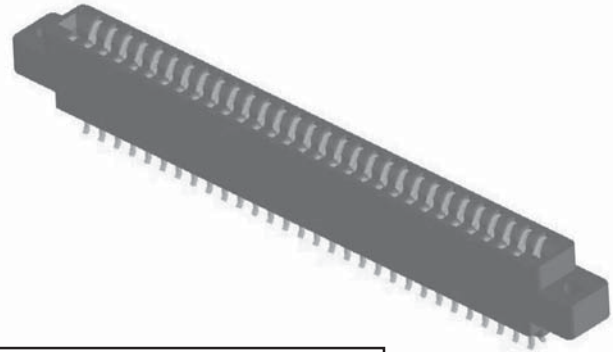
Positions/ Contacts	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
06/12	0.625	0.875	1.035	1.295	1.575	0.330	15.88	22.23	26.29	32.89	40.01	8.38
10/20	1.125	1.375	1.535	1.795	2.075		28.58	34.93	38.99	45.59	52.71	
14/28	1.625	1.875	2.035	2.295	2.575		41.28	47.63	51.69	58.29	65.41	
15/30	1.750	2.000	2.160	2.420	2.700		44.45	50.80	54.86	61.47	68.58	
18/36	2.125	2.375	2.535	2.795	3.075		53.98	60.33	64.39	70.99	78.11	
22/44	2.625	2.875	3.035	3.295	3.575		66.68	73.03	77.09	83.69	90.81	
28/56	3.375	3.625	3.785	4.045	4.325		85.73	92.08	96.14	102.74	109.86	
30/60	3.625	3.875	4.035	4.295	4.575		92.08	98.43	102.49	109.09	116.21	
31/62	3.750	4.000	4.160	4.420	4.700		95.25	101.60	105.66	112.27	119.38	
35/70	4.250	4.500	4.660	4.920	5.200		107.95	114.30	118.36	124.97	132.08	
36/72	4.375	4.625	4.785	5.045	5.325	0.370	111.13	117.48	121.54	128.14	135.26	9.40
37/74	4.500	4.750	4.910	5.170	5.450		114.30	120.65	124.71	131.32	138.43	
40/80	4.875	5.125	5.285	5.545	5.825		123.83	130.18	134.24	140.84	147.96	
43/86	5.250	5.500	5.660	5.920	6.200		133.35	139.70	143.76	150.37	157.48	
44/88	5.375	5.625	5.785	6.045	6.325		136.53	142.88	146.94	153.54	160.66	
49/98	6.000	6.250	6.410	6.670	6.950		152.40	158.75	162.81	169.42	176.53	
50/100	6.125	6.375	6.535	6.795	7.075		155.58	161.93	165.99	172.59	179.71	



.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height Dip Solder/Wire Wrap/Right Angle

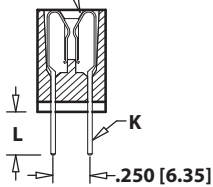
SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
(Consult factory for .031" $\pm$.008" [.79 $\pm$.20],
See page 52/53 for .093" $\pm$.008" [2.36 $\pm$.20]
and .125" $\pm$.008" [3.18 $\pm$.20] PC boards)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current
- Consult Factory for (MBB) Contacts



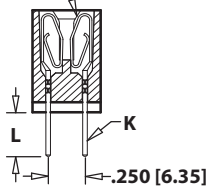
TERMINATION TYPE

HAIRPIN BELLOWS

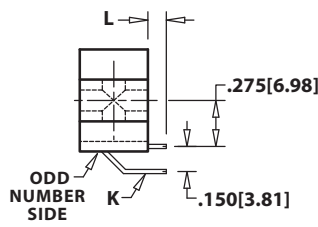


HAIRPIN BELLOWS
(CK,CS,CM,CW,CT)

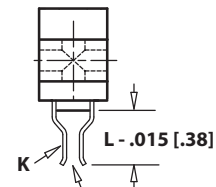
LOOP BELLOWS



LOOP BELLOWS
(TK,RS,RM,CK)



RIGHT ANGLE, DIP SOLDER
(CA,CB,CC,TA,TB,TM)

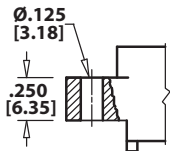


CARD EXTENDER
REQUIRES -S288 MODIFICATION CODE
(CS,CM,CT,RS,CK,TK,RM)

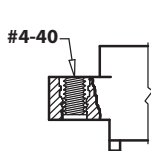
ACCEPTS .062 [1.57] PCB

HAIRPIN BELLOWS	LOOP BELLOWS	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L $\pm$.025 [.64]	FITS MIN. HOLE SIZE
CM	TK, CK	DIP SOLDER	.026 [.66] ROUND	.190 [4.83]	.030 [0.76]
	RS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
	RM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
	TA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
CA	TB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
CB	TM	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]
CC		DIP SOLDER	.015 x .025 [.38 x .64]	.125 [3.18]	.035 [0.76]
CW		DIP SOLDER	.015 x .025 [.38 x .64]	.170 [4.32]	.035 [0.76]
CT		DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.040 [1.02]
CS		DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.040 [1.02]

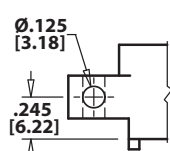
MOUNTING STYLE



CLEARANCE HOLE (H)



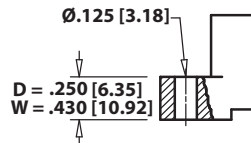
THREADED INSERT (I)



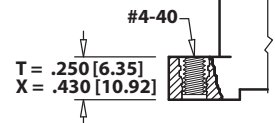
SIDE MOUNTING (S)



NO MOUNTING EARS (N)



FLUSH MOUNTING (D, W)



FLUSH MOUNTING WITH
THREADED INSERT (T, X)



**.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height
Dip Solder/Wire Wrap/Right Angle**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze (Standard)
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory for Other Materials)

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte
G = .000010" Gold	.000005" Gold
Y = .000030" Gold	.000005" Gold
Contact Surface	Overall Plating
S = .000010" Gold	.000010" Gold
M = .000030" Gold	.000010" Gold
E = .000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS
A = .125" [3.18mm]

NUMBER OF CONTACT POSITIONS
See Chart Below

READOUT (Opposite Page)
D = Dual
H = Half Loaded

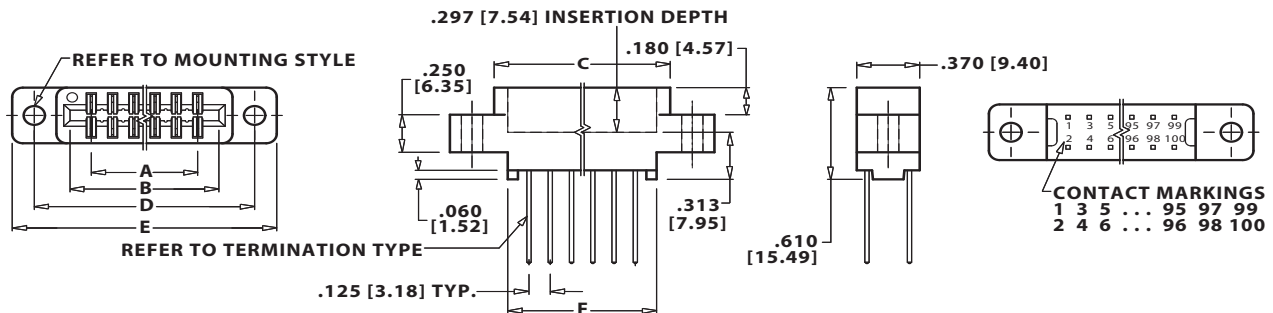
MODIFICATION CODE (Consult Factory)
OMIT FOR STANDARD
-S288 = Card Extender Accepts .062" [1.57] PCB

MOUNTING STYLE (Opposite Page)
H = Clearance Holes
I = Threaded Inserts
S = Side Mounting
N = No Mounting
W = Flush Mounting
D = Flush Mounting
X = Flush Mounting with Threaded Inserts
T = Flush Mounting with Threaded Inserts

TERMINATION TYPE (Opposite Page)
Hairpin Bellows **
CS = .025" [0.64mm] Square Dip Solder
CM = .025" [0.64mm] Square Wire Wrap
CA, CB, CC = .025" [0.64mm] Square Right Angle
CW, CT = .015" x .025" [0.38 x .64] Dip Solder
Loop Bellows
RS = .025" [0.64mm] Square Dip Solder
CK, TK = .026" [0.66mm] Round Dip Solder
RM = .025" [0.64mm] Square Wire Wrap
TA, TB, TM = .025" [0.64mm] Square Right Angle
****Available with B or C plating and Phosphor Bronze Only**

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

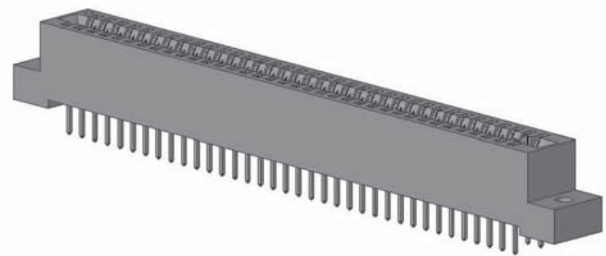




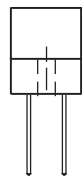
**.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Dip Solder/Wire Wrap/Right Angle for .093" [2.36] or .125" [3.18] Mating PCB**

SPECIFICATIONS

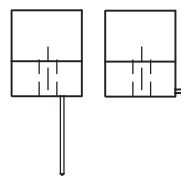
- Accommodates .093" $\pm$.008" [2.36 $\pm$.20] or .125" $\pm$.008" [3.18 $\pm$.20] mating PCB
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current



READOUT

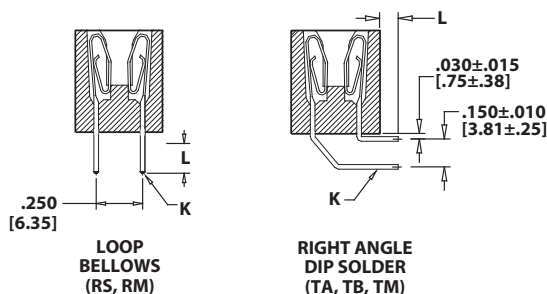


DUAL (D)



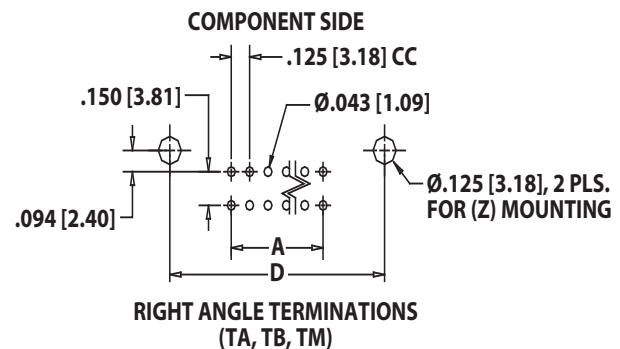
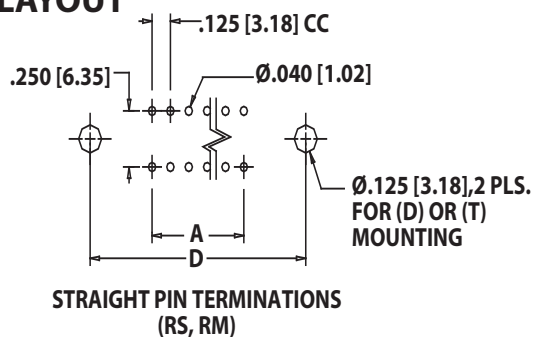
HALF LOADED (H)

TERMINATION TYPE

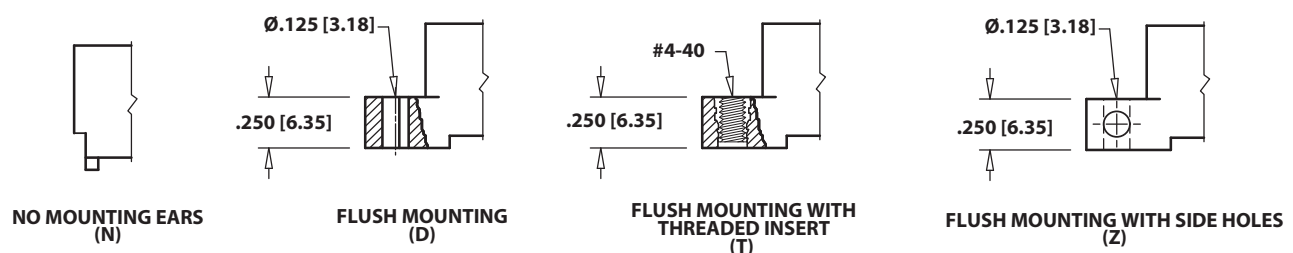


TERMINATION TYPE	POST CROSS SECTION (K)	POST LENGTH L $\pm$.025 [0.64]	FITS MIN. HOLE SIZE
RS DIP SOLDER	.025 [0.64] SQUARE	.190 [4.83]	.040 [1.02]
RM WIRE WRAP	.025 [0.64] SQUARE	.560 [14.20]	.040 [1.02]
TA RIGHT ANGLE	.025 [0.64] SQUARE	.100 [2.54]	.043 [1.09]
TB RIGHT ANGLE	.025 [0.64] SQUARE	.180 [4.57]	.043 [1.09]
TM RIGHT ANGLE	.025 [0.64] SQUARE	.250 [6.35]	.043 [1.09]

PCB LAYOUT



MOUNTING STYLE





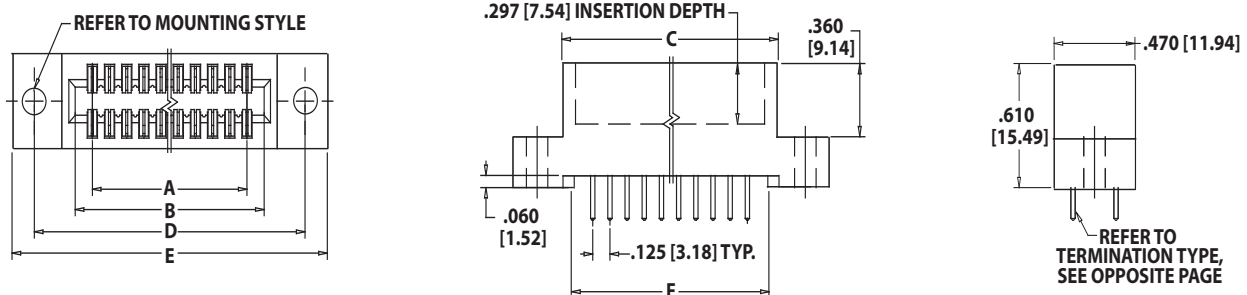
**.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Dip Solder/Wire Wrap/Right Angle for .093" [2.36] or .125" [3.18] Mating PCB**

PART NUMBER CODING

MATERIALS (Insulator/Contact)		E	B	A	50	D	RM	D	- S273	MODIFICATION CODE (Consult Factory) -S273 = FOR .093" ± .008" [2.36 ± .20] THICK MATING PCB -S664 = FOR .125" ± .008" [3.18 ± .20] THICK MATING PCB
E = PBT/Phosphor Bronze(Standard)										
R = PPS/Phosphor Bronze										
G = PA9T/Phosphor Bronze (Consult Factory for Other Materials)										
CONTACT FINISH - RoHS Compliant										MOUNTING STYLE (Opposite Page) N = No Mounting D = Flush Mounting T = Flush Mounting With Threaded Inserts Z = Flush Mounting With Side Holes
All platings are Lead Free and have .000050" Nickel underplate										
Contact Surface										
Termination										
B =	.000010" Gold									TERMINATION TYPE (Opposite Page) RS = .025" [0.64mm] Square Dip Solder RM = .025" [0.64mm] Square Wire Wrap TA, TB, TM = .025" [0.64mm] Square Right Angle
C =	.000030" Gold									
G =	.000010" Gold									
Y =	.000030" Gold									
Contact Surface										READOUT (OPPOSITE PAGE) D = Dual H = Half Loaded
Overall Plating										
S =	.000010" Gold									
M =	.000030" Gold									
E =	.000100" Pure Tin, Matte									NUMBER OF CONTACT POSITIONS See Chart Below
CONTACT CENTERS										
A = .125" [3.18mm]										

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12*	0.625	0.875	1.035	1.295	1.555	0.875	15.88	22.23	26.29	32.89	39.50	22.23
10/20*	1.125	1.375	1.535	1.795	2.055	1.375	28.58	34.93	38.99	45.59	52.20	34.93
14/28*	1.625	1.875	2.035	2.295	2.555	1.875	41.28	47.63	51.69	58.29	64.90	47.63
15/30*	1.750	2.000	2.160	2.420	2.680	2.000	44.45	50.80	54.86	61.47	68.07	50.80
18/36*	2.125	2.375	2.535	2.795	3.055	2.375	53.98	60.33	64.39	70.99	77.60	60.33
22/44*	2.625	2.875	3.035	3.295	3.555	2.875	66.68	73.03	77.09	83.69	90.30	73.03
24/48*	2.875	3.125	3.285	3.545	3.805	3.125	73.03	79.38	83.44	90.04	96.65	79.38
25/50*	3.000	3.250	3.410	3.670	3.930	3.250	76.20	82.55	86.61	93.22	99.82	82.55
28/56*	3.375	3.625	3.785	4.045	4.305	3.625	85.73	92.08	96.14	102.74	109.35	92.08
30/60	3.625	3.875	4.035	4.295	4.555	3.875	92.08	98.43	102.49	109.09	115.70	98.43
31/62*	3.750	4.000	4.160	4.420	4.680	4.000	95.25	101.60	105.66	112.27	118.87	101.60
32/64*	3.875	4.125	4.285	4.545	4.805	4.125	98.43	104.78	108.84	115.44	122.05	104.78
35/70*	4.250	4.500	4.660	4.920	5.180	4.500	107.95	114.30	118.36	124.97	131.57	114.30
36/72	4.375	4.625	4.785	5.045	5.305	4.625	111.13	117.48	121.54	128.14	134.75	117.48
40/80*	4.875	5.125	5.285	5.545	5.805	5.125	123.83	130.18	134.24	140.84	147.45	130.18
43/86*	5.250	5.500	5.660	5.920	6.180	5.500	133.35	139.70	143.76	150.37	156.97	139.70
44/88*	5.375	5.625	5.785	6.045	6.305	5.625	136.53	142.88	146.94	153.54	160.15	142.88
49/98*	6.000	6.250	6.410	6.670	6.930	6.250	152.40	158.75	162.81	169.42	176.02	158.75
50/100	6.125	6.375	6.535	6.795	7.055	6.375	155.58	161.93	165.99	172.59	179.20	161.93

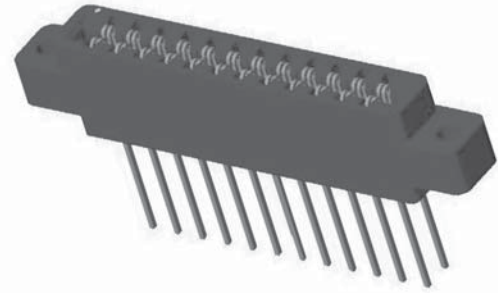
* Consult Factory For Availability.



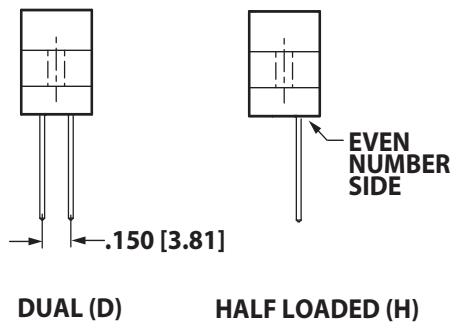
.150" [3.81 mm] Contact Centers, .550" [13.97 mm] Insulator Height Dip Solder/Wire Wrap

SPECIFICATIONS

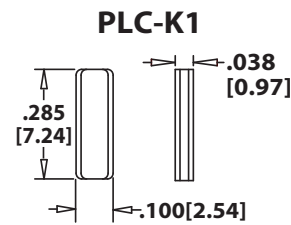
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm max. at rated current



READOUT

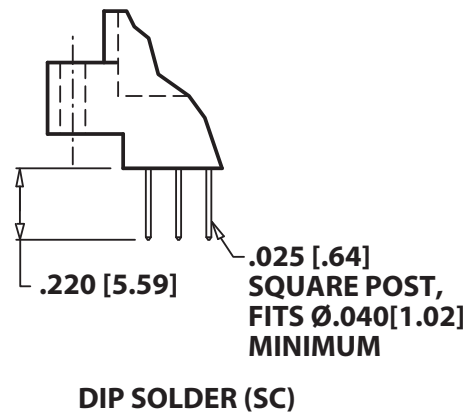
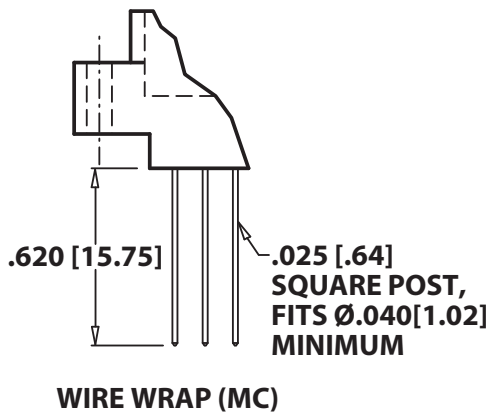


POLARIZING KEY

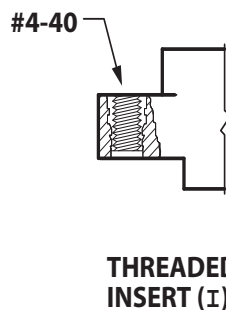
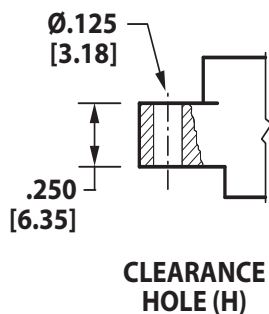


KEY IN BETWEEN CONTACTS
(ORDER SEPARATELY)

TERMINATION TYPE



MOUNTING STYLE



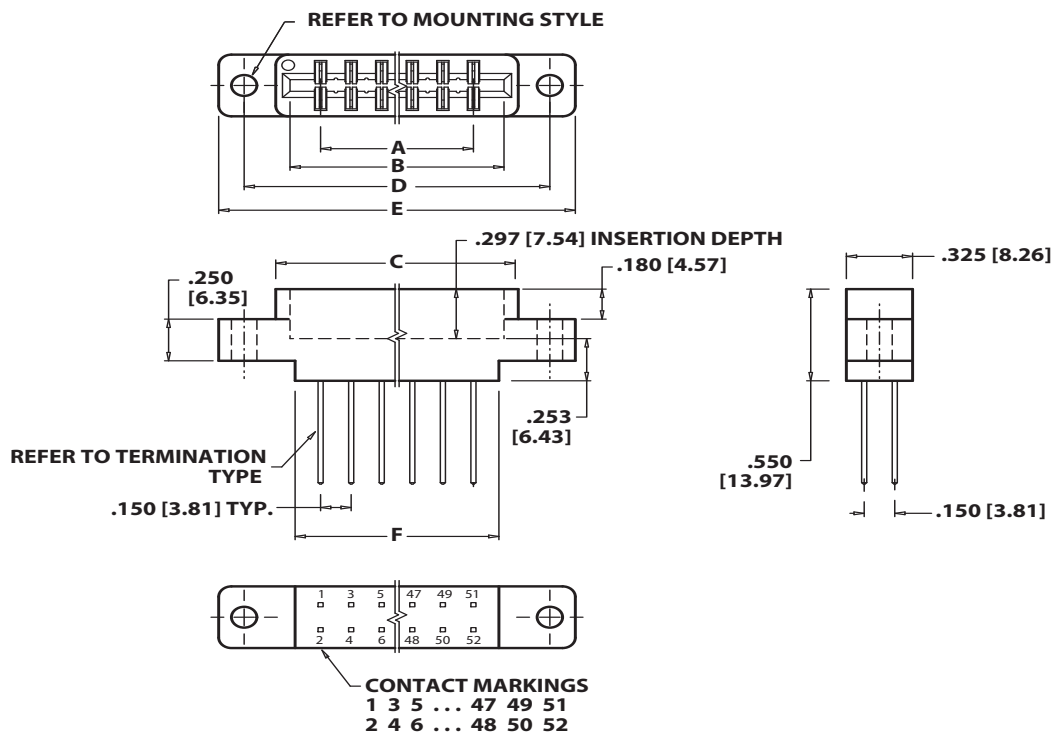


PART NUMBER CODING

E	B	J	26	D	MC	H	- Sxxx
MATERIALS (Insulator/Contact)							MODIFICATION CODE (Consult Factory) OMIT FOR STANDARD
E = PBT/Phosphor Bronze (Standard) R = PPS/Phosphor Bronze G = PA9T/Phosphor Bronze (Consult Factory for Other Materials)							MOUNTING STYLE (Opposite Page) H = Clearance Holes I = Threaded Inserts N = No Mounting
CONTACT FINISH - RoHS Compliant All platings are Lead Free and have .000050" Nickel underplate							TERMINATION TYPE (Opposite Page) <i>Hairpin Bellows</i> MC = .025" [.64mm] Square Wire Wrap SC = .025" [.64mm] Square Dip Solder
CONTACT SURFACE B = .000010" Gold C = .000030" Gold							
TERMINATION .000100" Pure Tin, Matte .000100" Pure Tin, Matte							
CONTACT CENTERS J = .150" [3.81mm]							READOUT (Opposite Page) D = Dual H = Half Loaded
NUMBER OF CONTACT POSITIONS See Chart Below							

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

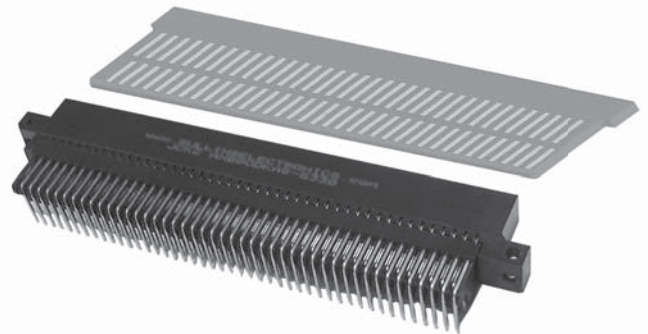
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
12/24	1.650	1.950	2.090	2.400	2.650	2.000	41.91	49.53	53.09	60.96	67.31	50.80
18/36*	2.550	2.850	2.990	3.300	3.550	2.800	64.77	72.39	75.95	83.82	90.17	71.12
22/44*	3.150	3.450	3.590	3.900	4.150	3.400	80.01	87.63	91.19	99.06	105.41	86.36
26/52	3.750	4.050	4.190	4.500	4.750	4.000	95.25	102.87	106.43	114.30	120.65	101.60
28/56*	4.050	4.350	4.490	4.800	5.050	4.300	102.87	110.49	114.05	121.92	128.27	109.22

* Consult Factory For Availability.

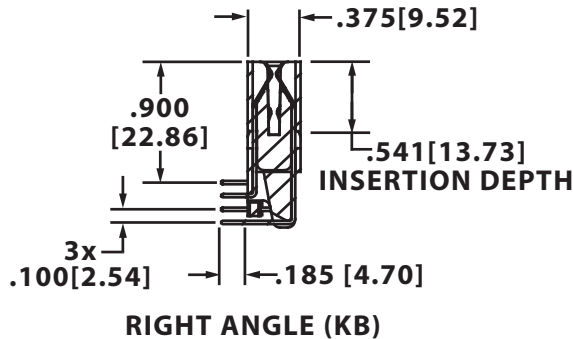


SPECIFICATIONS

- .078" Contact Center Spacing can replace .156" CC parts to double the number of contacts within the same area
- Backwards Compatible with Daughter Card Side
- Accommodates $.062" \pm .008"$ [1.57 $\pm$.20] PC board
- Contact Material: Beryllium Copper or Phosphor Bronze
- Body Material: PPS/PA9T
- UL Flammability: 94V-0
- 3 amp current rating per contact
- 75 grams minimum contact normal force
- Voltage Rating: 125 VDC Minimum at sea level
- Consult Factory for PC board layouts/technical drawings



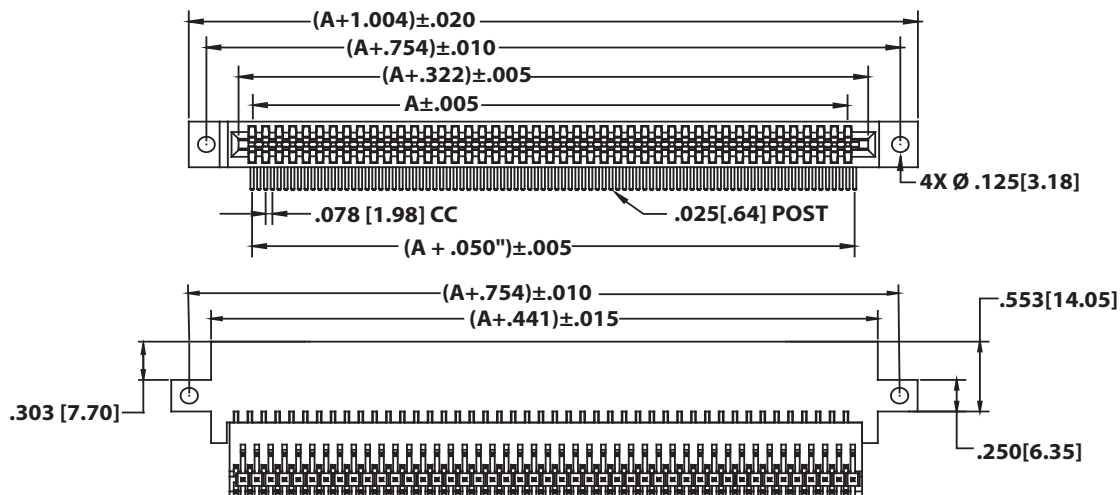
TERMINATION TYPE



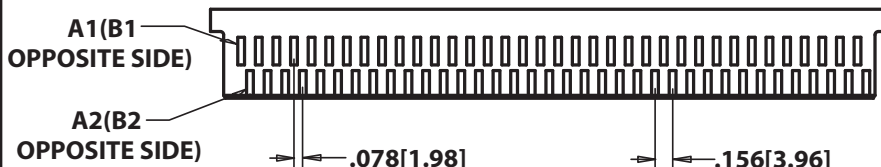
HIGH DENSITY
HIGH TEMPERATURE
HIGH CYCLE
HIGH RELIABILITY

DIMENSIONS

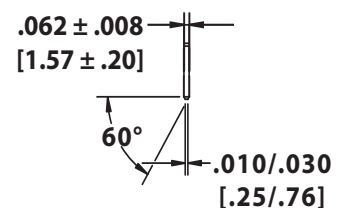
Dimensions in [] are in millimeters, all others are in inches.



DAUGHTER CARD LAYOUT



DAUGHTER CARD SIDE VIEW





PART NUMBER CODING

MATERIALS (INSULATOR/CONTACT)

- G = PA9T/Phosphor Bronze
Operating Temperature: 125°C
- R = PPS and PA9T/Phosphor Bronze
Operating Temperature: 125°C
- J = PA9T/Beryllium Copper
Operating Temperature: 150°C
- A = PPS and PA9T/Beryllium Copper
Operating Temperature: 150°C

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface Termination

- B = .000010" Gold .000100" Pure Tin, Matte
- C = .000030" Gold .000100" Pure Tin, Matte
- Y = .000030" Gold .000005" Gold

CONTACT CENTERS

- K = .078" [1.98mm]

A C K 10 D KB S - Sxxx

OMIT FOR STANDARD

S - S1075 = Staggered Ears with
Side Mounting Holes

A - S1076 = Staggered Ears with
#4-40 Threaded Inserts

POSITIONS	Dimension A (See Opposite Page)		
	No. of Contacts	Inches	[MM]
06	12	0.780	19.81
08	16	1.092	27.74
10	20	1.404	35.66
12	24	1.716	43.59
14	28	2.028	51.51
16	32	2.340	59.44
18	36	2.652	67.36
20	40	2.964	75.29
22	44	3.276	83.21
24	48	3.588	91.14
26	52	3.900	99.06
28	56	4.212	106.98
30	60	4.524	114.91
32	64	4.836	122.83
34	68	5.148	130.76
36	72	5.460	138.68
38	76	5.772	146.61
40	80	6.084	154.53
42	84	6.396	162.46
44	88	6.708	170.38
46	92	7.020	178.31
48	96	7.332	186.23
50	100	7.644	194.16
52	104	7.956	202.08
54	108	8.268	210.01
56	112	8.580	217.93
58	116	8.892	225.86
60	120	9.204	233.78
62	124	9.516	241.71
64	128	9.828	249.63
66	132	10.140	257.56
68	136	10.452	265.48
70	140	10.764	273.41
72	144	11.076	281.33

MOUNTING STYLE		
H	MOUNTING HOLES	
S	SIDE MOUNTING HOLES	
I	#4-40 THREADED INSERTS	
A	#4-40 THREADED INSERTS IN SIDE HOLES	
Z	FLUSH EARS WITH SIDE MOUNTING HOLES	
D	FLUSH EARS WITH Ø.125 HOLES	
T	FLUSH EARS WITH #4-40 THREADED INSERTS	
V	FLUSH EARS WITH #4-40 THREADED INSERTS IN SIDE HOLES	
N	NO MOUNTING EARS	

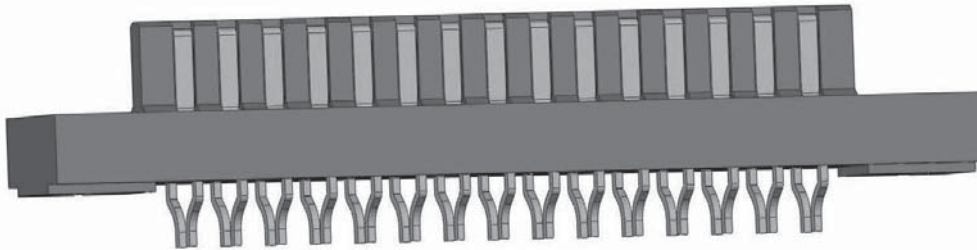
MODIFICATION CODE
(CONSULT FACTORY)
STAGGERED EARS WITH SIDE MOUNTING HOLES (S-S1075)
STAGGERED EARS WITH #4-40 THREADED INSERTS (A-S1076)



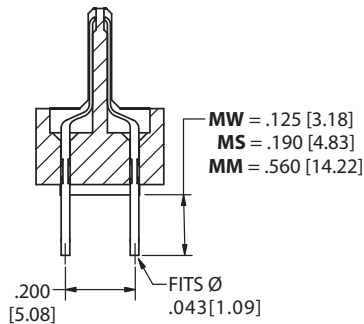
**.156" [3.96 mm] Contact Centers, .540" [13.72 mm] Insulator Height,
Male Edgecard, Dip Solder/Right Angle/Card Extender**

SPECIFICATIONS

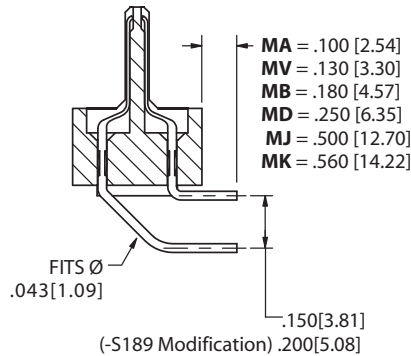
- Compatible with .431" or .610" Insulator Height Edgecards
- Mates in place of .062" [1.57] PCB
- PBT or PA9T insulator
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current



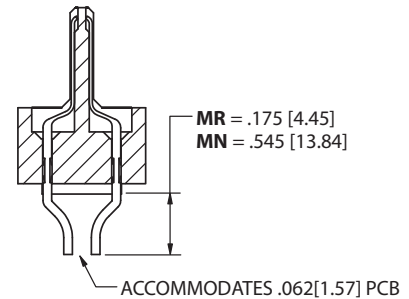
TERMINATION TYPE



**DIP SOLDER (MW, MS)
WIRE WRAP (MM)**

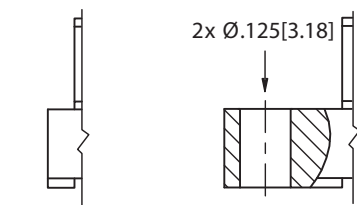


**RIGHT ANGLE
(MA, MV, MB, MD, MJ, MK)**

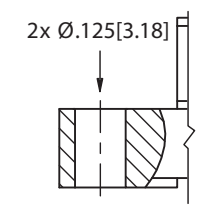


**CARD EXTENDER
(MR, MN)**

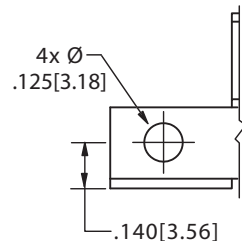
MOUNTING STYLE



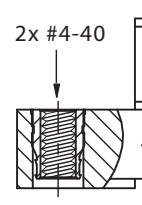
**NO
MOUNTING
(N)**



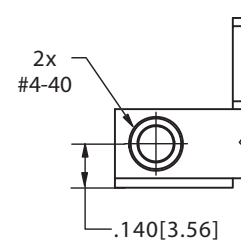
**FLUSH with
CLEARANCE HOLES
(D)**



**FLUSH, SIDE MOUNTING
with CLEARANCE HOLES
(Z)**



**FLUSH with
THREADED INSERT
(T)**



**FLUSH, with SIDE MOUNTED
THREADED INSERT
(V)**



**.156" [3.96 mm] Contact Centers, .540" [13.72 mm] Insulator Height,
Male Edgecard, Dip Solder/Right Angle/Card Extender**

PART NUMBER OPTIONS

MATERIALS (Insulator/Contact)

- E = PBT/Phosphor Bronze
Operating Temperature: -65°C to 125°C
Processing Temperature: 260°C for 10 seconds Max.
- G = PA9T/Phosphor Bronze
Operating Temperature: -65°C to 150°C
Processing Temperature: 260°C for 120 seconds Max.

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface

- B = .000010" Gold .000100" Pure Tin, Matte
C = .000030" Gold .000100" Pure Tin, Matte
Y = .000030" Gold .000005" Gold

Termination

CONTACT CENTERS

- M = .156" [3.96mm]

NUMBER OF CONTACT POSITIONS

04 thru 60 Positions (Contact Factory for Positions Not Shown)

E B M 25 M MW D - Sxxx

MODIFICATIONS (Consult Factory)

- Omit for Standard
-S189 = .200" Row Spacing (Right Angle Only)

MOUNTING STYLE (Opposite Page)

- N = No Mounting
D = .250" Ears, Flush Mounting, .125" [3.18mm] Dia
Z = .250" Ears, Flush, Side Mounting
T = .250" Ears, Flush Mounting, #4-40 Threaded Insert
V = Flush, Side Mounting, #4-40 Threaded Insert

TERMINATION TYPE (Opposite Page)

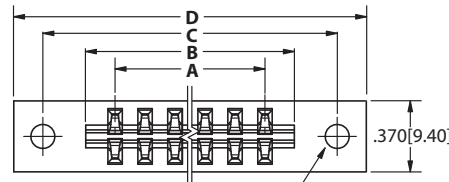
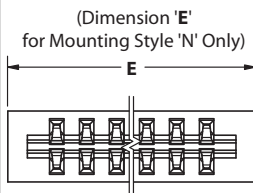
- MW, MS = Dip Solder
MM = Wire Wrap
MA, MV, MB = Right Angle
MD, MJ, MK = Right Angle
MR, MN = Card Extender

M = Male Edgecard

DIMENSIONS

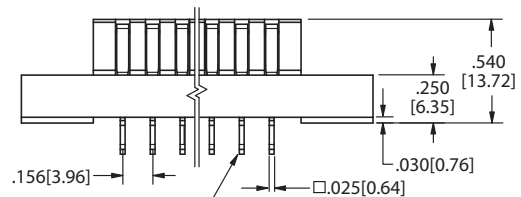
Dimensions in [] are in millimeters, all others are in inches.

(Dimensions 'D' & 'C' for Mounting Style 'D, Z, T, V' Only)



REFER TO MOUNTING STYLE

REFER TO TERMINATION TYPE



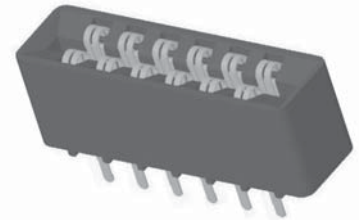
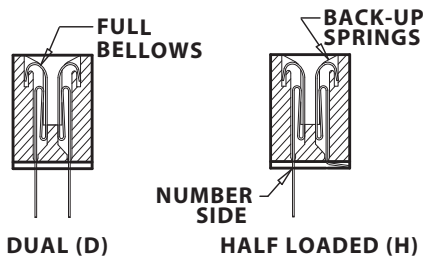
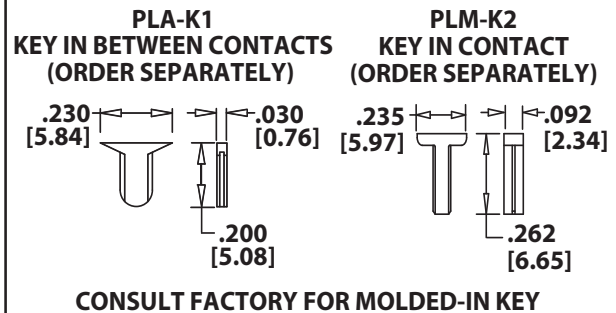
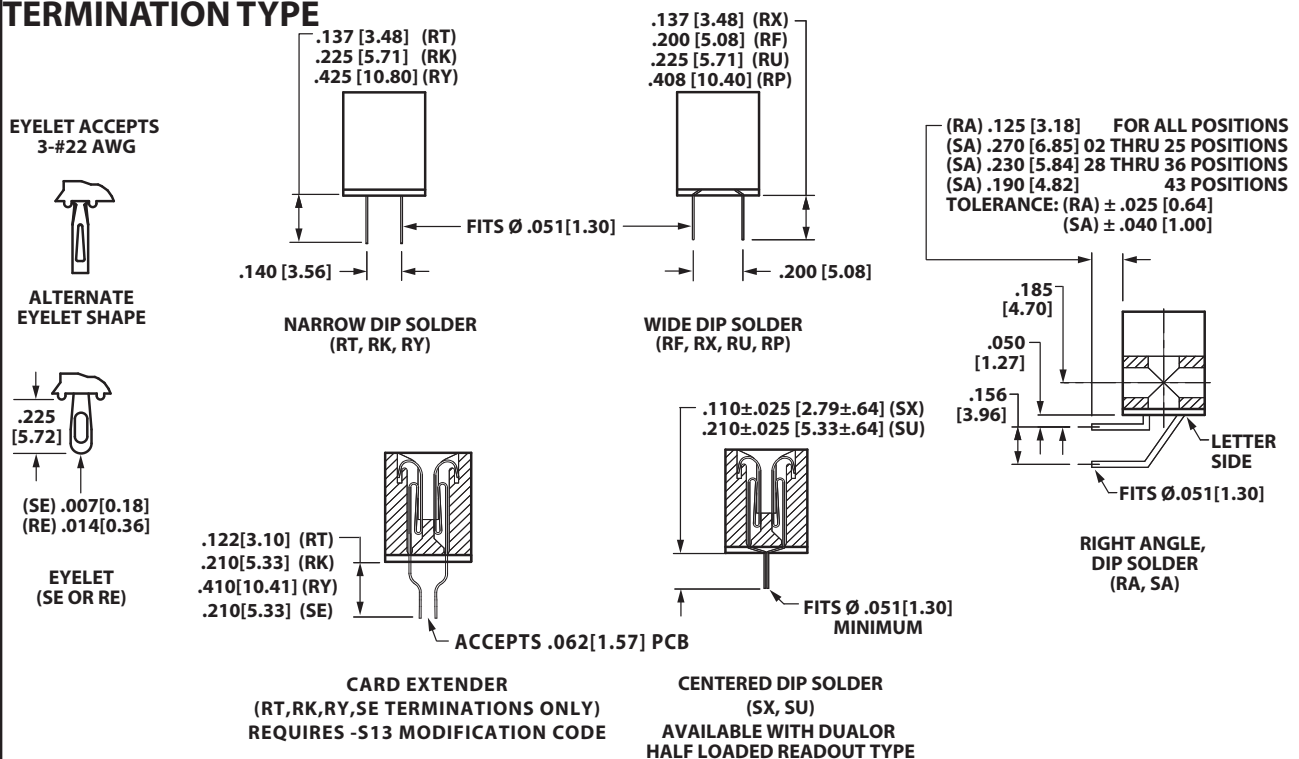
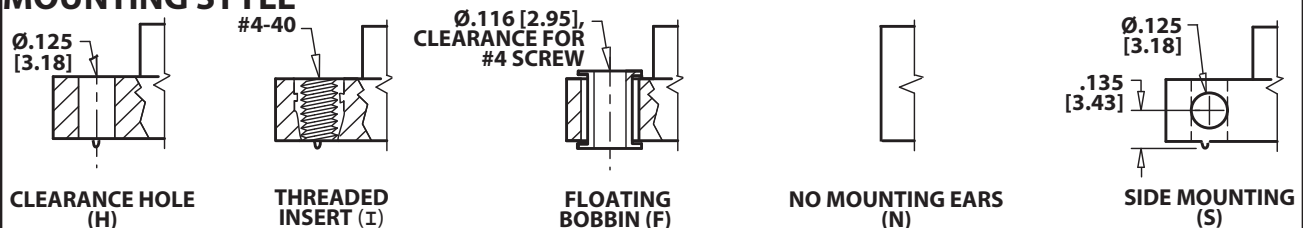
POSITIONS/ CONTACTS	INCHES					[MILLIMETERS]				
	A±.008	B±.008	C±.010	D±.020	E±.020 'N' Mtg. Only	A±0.20	B±0.20	C±0.25	D±0.51	E±0.51 'N' Mtg. Only
04/08*	0.468	0.774	1.221	1.524	0.944	11.89	19.66	31.01	38.71	23.98
05/10*	0.624	0.930	1.377	1.680	1.100	15.85	23.62	34.98	42.67	27.94
06/12	0.780	1.086	1.533	1.836	1.256	19.81	27.58	38.94	46.63	31.90
07/14*	0.936	1.242	1.689	1.992	1.412	23.77	31.55	42.90	50.60	35.86
08/16*	1.092	1.398	1.845	2.148	1.568	27.74	35.51	46.86	54.56	39.83
09/18*	1.248	1.554	2.001	2.304	1.724	31.70	39.47	50.83	58.52	43.79
10/20	1.404	1.710	2.157	2.460	1.880	35.66	43.43	54.79	62.48	47.75
11/22*	1.560	1.866	2.313	2.616	2.036	39.62	47.40	58.75	66.45	51.71
12/24	1.716	2.022	2.469	2.772	2.192	43.59	51.36	62.71	70.41	55.68
13/26*	1.872	2.178	2.625	2.928	2.348	47.55	55.32	66.68	74.37	59.64
14/28	2.028	2.334	2.781	3.084	2.504	51.51	59.28	70.64	78.33	63.60
15/30*	2.184	2.490	2.937	3.240	2.660	55.47	63.25	74.60	82.30	67.56
16/32	2.340	2.646	3.093	3.396	2.816	59.44	67.21	78.56	86.26	71.53
17/34*	2.496	2.802	3.249	3.552	2.972	63.40	71.17	82.52	90.22	75.49
18/36	2.652	2.958	3.405	3.708	3.128	67.36	75.13	86.49	94.18	79.45
19/38*	2.808	3.114	3.561	3.864	3.284	71.32	79.10	90.45	98.15	83.41
20/40	2.964	3.270	3.717	4.020	3.440	75.29	83.06	94.41	102.11	87.38
21/42*	3.120	3.426	3.873	4.176	3.596	79.25	87.02	98.37	106.07	91.34
22/44	3.276	3.582	4.029	4.332	3.752	83.21	90.98	102.34	110.03	95.30
23/46*	3.432	3.738	4.185	4.488	3.908	87.17	94.95	106.30	114.00	99.26
24/48	3.588	3.894	4.341	4.644	4.064	91.14	98.91	110.26	117.96	103.23
25/50*	3.744	4.050	4.497	4.800	4.220	95.10	102.87	114.22	121.92	107.19
26/52*	3.900	4.206	4.653	4.956	4.376	99.06	106.83	118.19	125.88	111.15
27/54*	4.056	4.362	4.809	5.112	4.532	103.02	110.79	122.15	129.84	115.11
28/56	4.212	4.518	4.965	5.268	4.688	106.98	114.76	126.11	133.81	119.08
29/58*	4.368	4.674	5.121	5.424	4.844	110.95	118.72	130.07	137.77	123.04
30/60	4.524	4.830	5.277	5.580	5.000	114.91	122.68	134.04	141.73	127.00
31/62*	4.680	4.986	5.433	5.736	5.156	118.87	126.64	138.00	145.69	130.96
32/64*	4.836	5.142	5.589	5.892	5.312	122.83	130.61	141.96	149.66	134.92
33/66*	4.992	5.298	5.745	6.048	5.468	126.80	134.57	145.92	153.62	138.89
34/68	5.148	5.454	5.901	6.204	5.624	130.76	138.53	149.89	157.58	142.85
35/70*	5.304	5.610	6.057	6.360	5.780	134.72	142.49	153.85	161.54	146.81
36/72	5.460	5.766	6.213	6.516	5.936	138.68	146.46	157.81	165.51	150.77
37/74*†	5.616	5.922	-----	-----	6.092	142.65	150.42	-----	-----	154.74
38/76†	5.772	6.078	-----	-----	6.248	146.61	154.38	-----	-----	158.70
39/78*†	5.928	6.234	-----	-----	6.404	150.57	158.34	-----	-----	162.66
40/80†	6.084	6.390	-----	-----	6.560	154.53	162.31	-----	-----	166.62

*Consult factory for availability

† Available in 'N' Mounting Only

**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle****SPECIFICATIONS**

- Accommodates .062" ± .008" [1.57 ± .20] PC board
- Molded-in key available
- 3 amp current rating per contact
(for 5 amp application, consult factory)
- 30 milli ohm maximum at rated current

**READOUT****POLARIZING KEY****TERMINATION TYPE****MOUNTING STYLE**



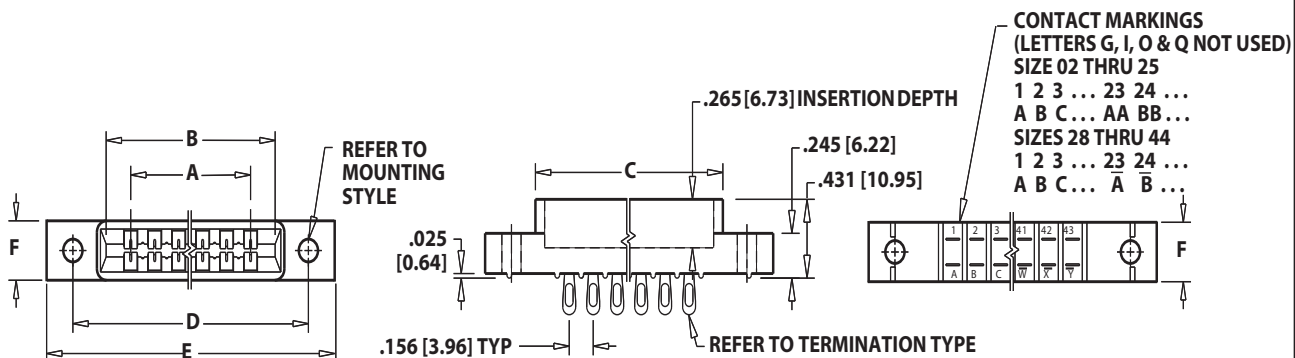
**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Dip Solder/Eyelet/Right Angle**

PART NUMBER CODING

MATERIALS (Insulator/Contact)	E	B	M	43	D	RK	H	- Sxxx	MODIFICATION CODE (Consult Factory)
E = PBT/Phosphor Bronze (Standard)									OMIT FOR STANDARD
R = PPS/Phosphor Bronze									-S13 = Card Extender Accepts .062"[1.57] PCB (RT, RK, RY, SE Terminations Only)
G = PA9T/Phosphor bronze									
H = PBT/Beryllium Copper									
A = PPS/Beryllium Copper									
J = PA9T/Beryllium Copper									
*F = PPS/Spinodal (Overall Gold Plating Only)									
Consult Factory for Special Soldering Guidelines									
*C = PPS/Beryllium Nickel (Overall Gold Plating Only)									
*W = PEEK/Beryllium Nickel (Overall Gold Plating Only)									
*Consult Factory for availability.									
CONTACT FINISH - RoHS Compliant									
All platings are Lead Free and have .000050" Nickel underplate									
Contact Surface									TERMINATION TYPE (Opposite Page)
B = .000010" Gold									RA = .125" Right Angle Dip Solder
C = .000030" Gold									SA = Long Right Angle Dip Solder
G = .000010" Gold									RT = .140" x .137" Dip Solder
Y = .000030" Gold									RK = .140" x .225" Dip Solder
Contact Surface									RY = .140" x .425" Dip Solder
S = .000010" Gold									RX = .200" x .137" Dip Solder
M = .000030" Gold									RF = .200" x .200" Dip Solder
E = .000100" Pure Tin, Matte									RU = .200" x .225" Dip Solder
									RP = .200" x .408" Dip Solder
									SX = .110" [2.79mm] Centered Dip Solder
									SU = .210" [5.33mm] Centered Dip Solder
									SE = .007" [0.18mm] Thick Eyelet
									RE = .014" [0.36mm] Thick Eyelet
									READOUT (Opposite Page)
									D = Dual
									D = Dual Row/ Crimp to Center for Single Readout (SX, SU Termination Only)
									H = Half Loaded

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

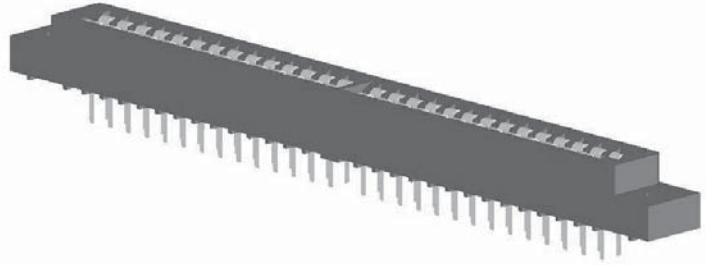
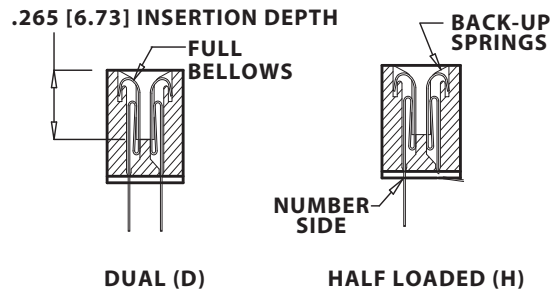
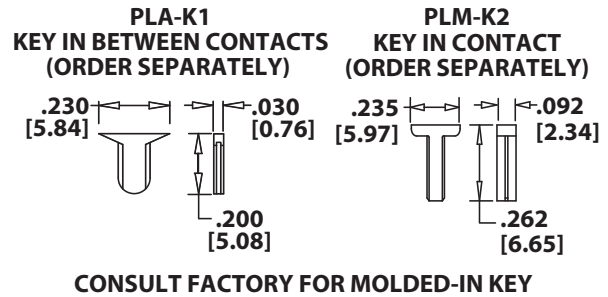
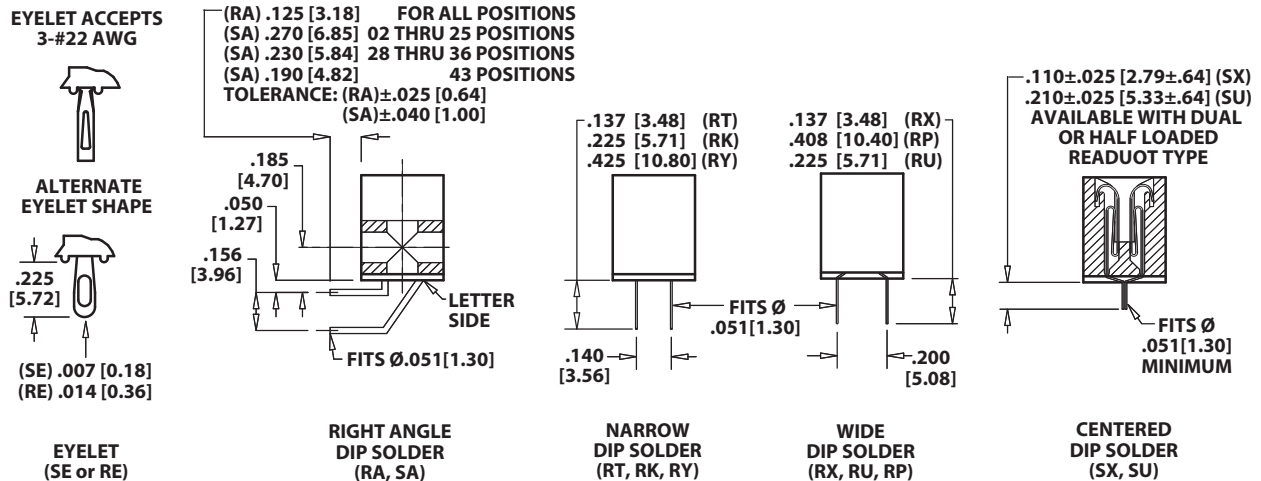
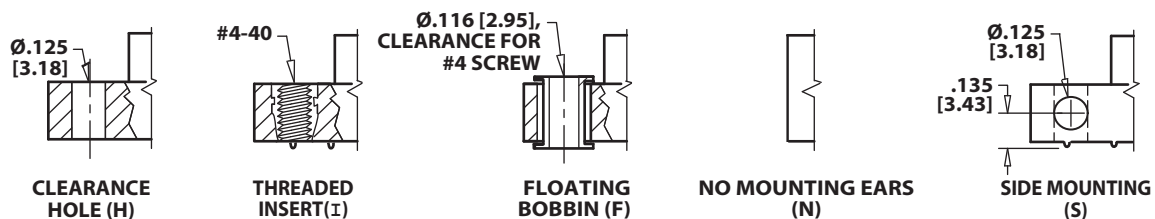


Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E MAX	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E MAX	F±0.13
02/04	0.156	0.476	0.596	.156	.431		3.96	12.09	15.14	.156	.431	
03/06	0.312	0.632	0.752	.156	.431		7.92	16.05	19.10	.156	.431	
06/12	0.780	1.100	1.220	1.533	1.902		19.81	27.94	30.99	38.94	48.31	
08/16	1.092	1.412	1.532	1.845	2.214		27.74	35.86	38.91	46.86	56.24	
10/20	1.404	1.724	1.844	2.157	2.526		35.66	43.79	46.84	54.79	64.16	
11/22	1.560	1.880	2.000	2.313	2.682		39.62	47.75	50.80	58.75	68.12	
12/24	1.716	2.036	2.156	2.469	2.838		43.59	51.71	54.76	62.71	72.09	
15/30	2.184	2.504	2.624	2.937	3.306		55.47	63.60	66.65	74.60	83.97	
18/36	2.652	2.972	3.092	3.405	3.774		67.36	75.49	78.54	86.49	95.86	
22/44	3.276	3.596	3.716	4.029	4.398		83.21	91.34	94.39	102.34	111.71	
24/48	3.588	3.908	4.028	4.341	4.710		91.14	99.26	102.31	110.26	119.63	
25/50	3.744	4.064	4.184	4.497	4.866		95.10	103.23	106.27	114.22	123.60	
28/56	4.212	4.532	4.652	4.965	5.334		106.98	115.11	118.16	126.11	135.48	
36/72	5.460	5.780	5.900	6.213	6.582		138.68	146.81	149.86	157.81	167.18	
43/86	6.552	6.872	6.992	7.305	7.674		166.42	174.55	177.60	185.55	194.92	
44/88	6.708	7.028	7.148	7.461	7.830		170.38	178.51	181.56	189.51	198.88	

**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Special Body Configuration Dip Solder/Eyelet/Right Angle****SPECIFICATIONS**

- Accommodates .062" $\pm$.008"
[1.57 $\pm$.20] PC board
- Molded-in key available
- 3 amp current rating per contact
(for 5 amp application, consult factory)
- 30 milli ohm maximum at rated current

**READOUT****POLARIZING KEY****TERMINATION TYPE****MOUNTING STYLE**



**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height
Special Body Configuration Dip Solder/Eyelet/Right Angle**

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze (Standard)
R = PPS/Phosphor Bronze
G = PA9T/Phosphor bronze
H = PBT/Beryllium Copper
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
*F = PPS/Spinodal (Overall Gold Plating Only)
Consult Factory for Special Soldering Guidelines
*C = PPS/Beryllium Nickel (Overall Gold Plating Only)
*W = PEEK/Beryllium Nickel (Overall Gold Plating Only)
*Consult Factory for availability.

CONTACT FINISH - RoHS Compliant
All platings are Lead Free and have .000050" Nickel underplate

	Contact Surface	Termination
B =	.000010" Gold	.000100" Pure Tin, Matte
C =	.000030" Gold	.000100" Pure Tin, Matte
G =	.000010" Gold	.000005" Gold
Y =	.000030" Gold	.000005" Gold
	Contact Surface	Overall Plating
S =	.000010" Gold	.000010" Gold
M =	.000030" Gold	.000010" Gold
E =	.000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS
M = .156" [3.96mm]

NUMBER OF CONTACT POSITIONS
28 (14/14), 36 or 43

MODIFICATION CODE (Consult Factory)
-S37 = Reverse Contact ID & Shorter Card Slot Length
-S92 = Center Barrier Molded in Card Slot

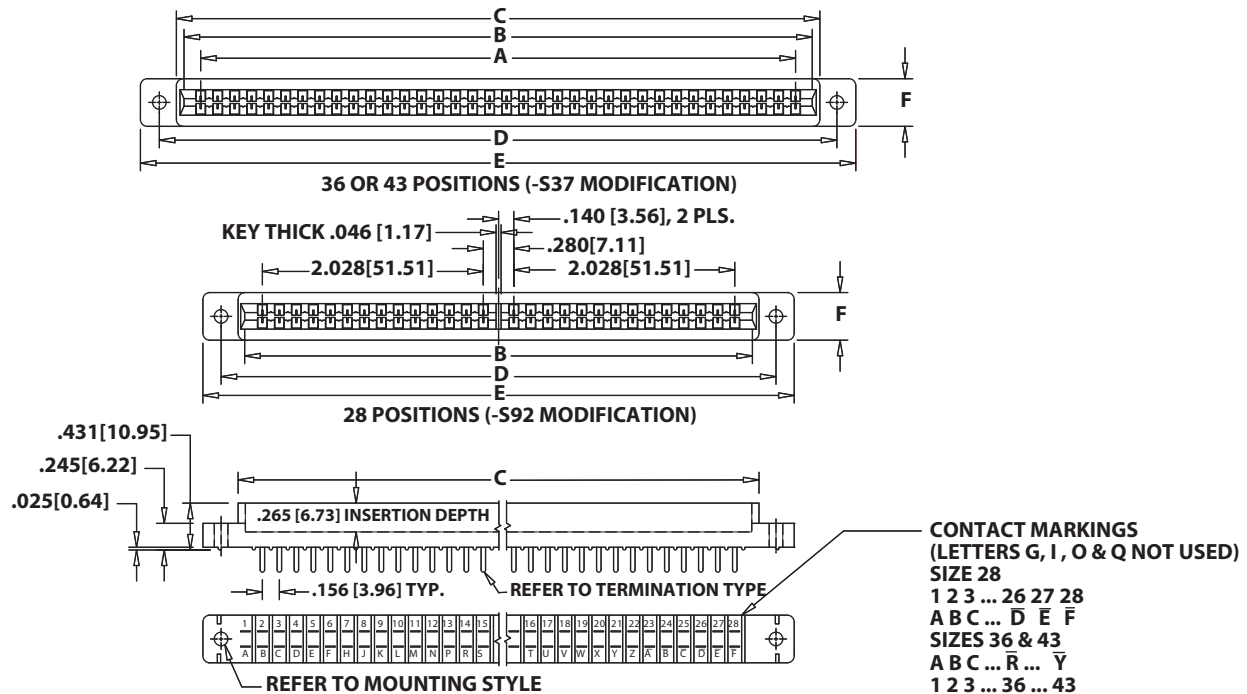
MOUNTING STYLE (Opposite Page)
H = .125" [3.18mm] Clearance Holes
N = No Mounting
S = Side Mounting
I = Threaded Insert
F = Floating Bobbin

TERMINATION TYPE (Opposite Page)
RA = .125" Right Angle Dip Solder
SA = Long Right Angle Dip Solder
RT = .140" x .137" Dip Solder
RK = .140" x .225" Dip Solder
RY = .140" x .425" Dip Solder
RX = .200" x .137" Dip Solder
RU = .200" x .225" Dip Solder
RP = .200" x .408" Dip Solder
SX = .110" [2.79mm] Centered Dip Solder
SU = .210" [5.33mm] Centered Dip Solder
SE = .007" [0.18mm] Thick Eyelet
RE = .014" [0.36mm] Thick Eyelet

READOUT (Opposite Page)
D = Dual
D = Dual Row/ Crimp to Center for Single
Readout (SX, SU Termination Only)
H = Half Loaded

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

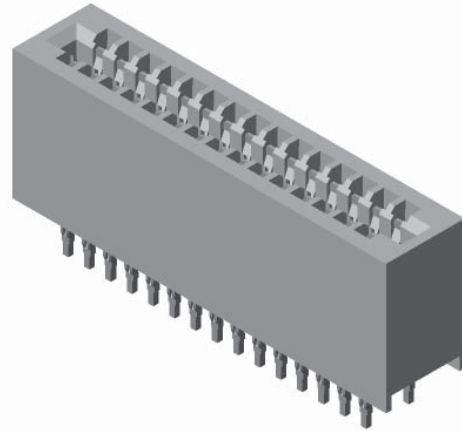


Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]						CENTER BARRIER
	A±.008	B±.008	C±.015	D±.010	E MAX	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E MAX	F±0.13	
28/56		4.660	4.780	5.093	5.427	0.438		118.36	121.41	129.36	137.85	11.13	YES
36/72	5.460	5.766	5.906	6.219	6.566	0.438	138.68	146.46	150.01	157.96	166.78	11.13	NO
43/86	6.552	6.810	7.000	7.302	7.643	0.500	166.42	172.97	177.80	185.47	194.13	12.70	NO

**.156" [3.96 mm] Contact Centers, .550" [13.97 mm] or .610" [15.49 mm] Profile
Press Fit****SPECIFICATIONS**

- Designed to meet specifications of Bellcore specification TR-TSY-00078.
- Flat rock installation eliminates the need for any special installation tool.
- Integrally molded scoops available to assist daughter card entry.
- Various insulator options per customer requirements, including:
 - Open ended on one side
 - Open ended on both sides to accommodate end to end mounting
 - Molded in keys per customer requirements.

**FEATURES****COMPLIANT SECTION INSERTION FORCE**

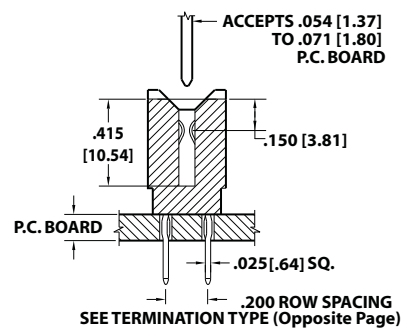
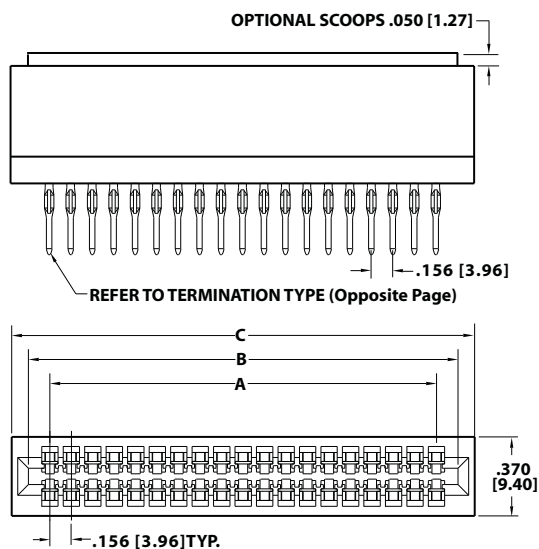
40 lbs maximum per contact

COMPLIANT SECTION WITHDRAWAL FORCE

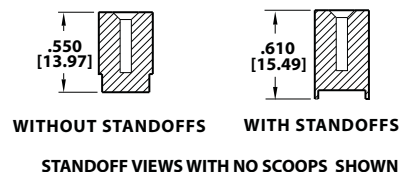
10 lbs minimum per contact

HOLE SIZE REQUIREMENTSDrilled Hole Diameter: $.0453" \pm .0010" [1.15 \pm .03]$ Plating: $.001" [.03]$ to $.003" [.08]$ Copper and $.0003" [.01]$ Minimum Tin**FINISHED HOLE DIAMETER** $.040" \pm .003" [1.02 \pm .08]$ **SUITABLE FOR .062" [1.57] DAUGHTER CARD****RECOMMENDED MOTHERBOARD THICKNESS** $.093" \text{ to } .125" [2.36 \text{ to } 3.18]$ **UL-CUL RECOGNIZED****DIMENSIONS**

Dimensions in [] are in millimeters, all others are in inches.



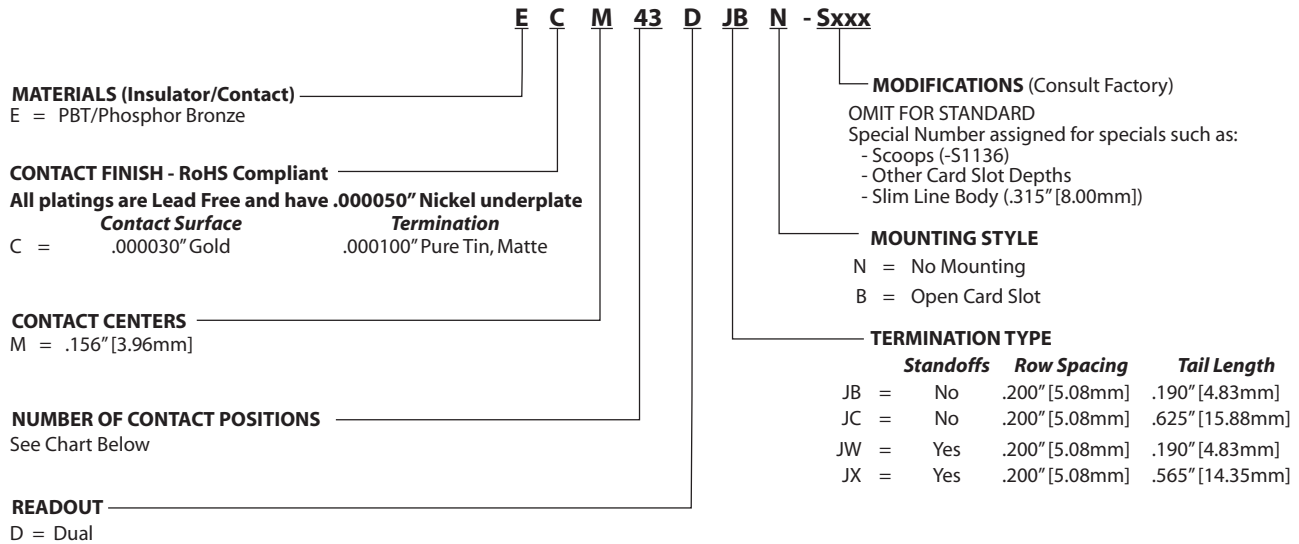
-S1136 (WITH SCOOPS) SHOWN ABOVE





**.156" [3.96 mm] Contact Centers, .550" [13.97 mm] or .610" [15.49 mm] Profile
Press Fit**

PART NUMBER CODING

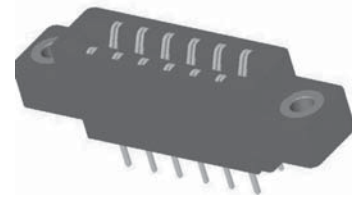
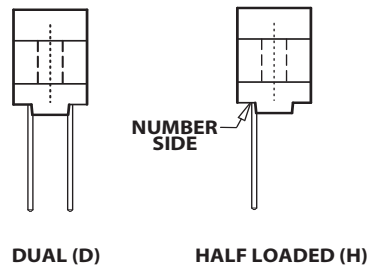
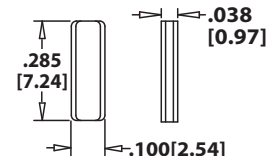


POSITIONS/ CONTACTS	A±.008[0.20]		B±.008[0.20]		C±.015[0.38]	
	INCH	[MM]	INCH	[MM]	INCH	[MM]
05/10	0.624	15.85	0.944	23.98	1.080	27.43
06/12	0.780	19.81	1.100	27.94	1.236	31.39
07/14	0.936	23.77	1.256	31.90	1.392	35.36
08/16	1.092	27.74	1.412	35.86	1.548	39.32
09/18	1.248	31.70	1.568	39.83	1.704	43.28
10/20	1.404	35.66	1.724	43.79	1.860	47.24
11/22	1.560	39.62	1.880	47.75	2.016	51.21
12/24	1.716	43.59	2.036	51.71	2.172	55.17
13/26	1.872	47.55	2.192	55.68	2.328	59.13
14/28	2.028	51.51	2.348	59.64	2.484	63.09
15/30	2.184	55.47	2.504	63.60	2.640	67.06
16/32	2.340	59.44	2.660	67.56	2.796	71.02
17/34	2.496	63.40	2.816	71.53	2.952	74.98
18/36	2.652	67.36	2.972	75.49	3.108	78.94
19/38	2.808	71.32	3.128	79.45	3.264	82.91
20/40	2.964	75.29	3.284	83.41	3.420	86.87
21/42	3.120	79.25	3.440	87.38	3.576	90.83
22/44	3.276	83.21	3.596	91.34	3.732	94.79

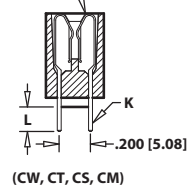
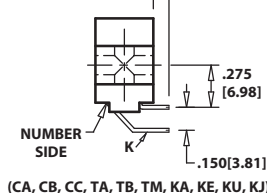
POSITIONS/ CONTACTS	A±.008[0.20]		B±.008[0.20]		C±.015[0.38]	
	INCH	[MM]	INCH	[MM]	INCH	[MM]
23/46	3.432	87.17	3.752	95.30	3.888	98.76
24/48	3.588	91.14	3.908	99.26	4.044	102.72
25/50	3.744	95.10	4.064	103.23	4.200	106.68
26/52	3.900	99.06	4.220	107.19	4.356	110.64
27/54	4.056	103.02	4.376	111.15	4.512	114.60
28/56	4.212	106.98	4.532	115.11	4.668	118.57
29/58	4.368	110.95	4.688	119.08	4.824	122.53
30/60	4.524	114.91	4.844	123.04	4.980	126.49
31/62	4.680	118.87	5.000	127.00	5.136	130.45
32/64	4.836	122.83	5.156	130.96	5.292	134.42
33/66	4.992	126.80	5.312	134.92	5.448	138.38
34/68	5.148	130.76	5.468	138.89	5.604	142.34
35/70	5.304	134.72	5.624	142.85	5.760	146.30
36/72	5.460	138.68	5.780	146.81	5.916	150.27
37/74	5.616	142.65	5.936	150.77	6.072	154.23
38/76	5.772	146.61	6.092	154.74	6.228	158.19
39/78	5.928	150.57	6.248	158.70	6.384	162.15

**.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height**
Dip Solder/Wire Wrap/Right Angle/Card Extender**SPECIFICATIONS**

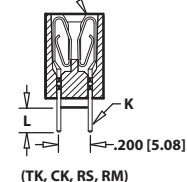
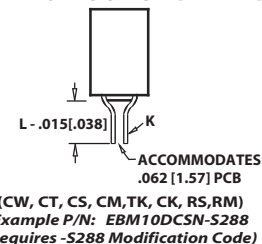
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board (See page 68/69 for .093" $\pm$.008" [2.36 $\pm$.20] and .125" $\pm$.008" [3.18 $\pm$.20] boards)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

**READOUT****POLARIZING KEY****PLC-K1****KEY IN BETWEEN CONTACTS**
(ORDER SEPARATELY)**TERMINATION TYPE**

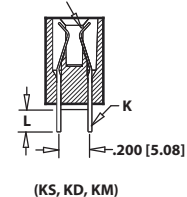
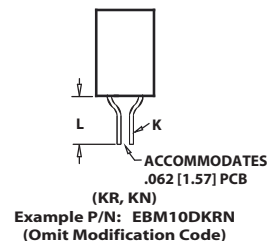
HAIRPIN BELLOWS	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
CW	DIP SOLDER	.015 x .025 [.38 x .64]	.125 [3.18]	.035 [0.76]
CT	DIP SOLDER	.015 x .025 [.38 x .64]	.170 [4.32]	.035 [0.76]
CS	DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.040 [1.02]
CM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
CA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
CB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
CC	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

HAIRPIN BELLOWS**RIGHT ANGLE**

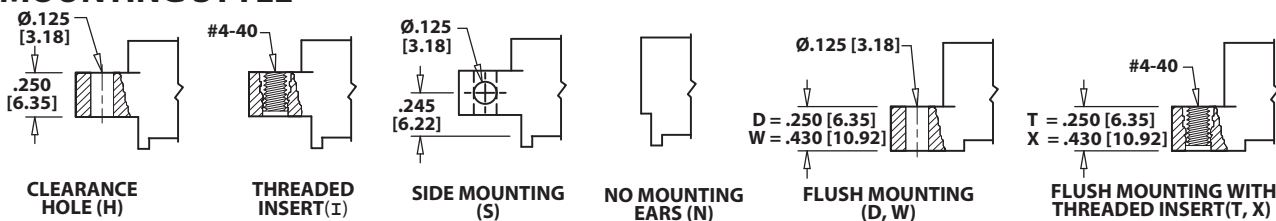
LOOP BELLOWS	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
TK, CK	DIP SOLDER	.026 [.66] ROUND	.190 [4.83]	.030 [0.76]
RS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
RM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
TA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
TB	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
TM	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

LOOP BELLOWS**HAIRPIN or LOOP CARD EXTENDER**

CANTILEVER	TERMINATION TYPE	POST CROSS SECTION K	POST LENGTH L .025 [.64]	FITS MIN. HOLE SIZE
KS	DIP SOLDER	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
KD	DIP SOLDER	.025 [.64] SQUARE	.160 [4.06]	.043 [1.09]
KM	WIRE WRAP	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
*KA	RIGHT ANGLE	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
*KE	RIGHT ANGLE	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
*KU	RIGHT ANGLE	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]
*KJ	RIGHT ANGLE	.025 [.64] SQUARE	.500 [12.70]	.043 [1.09]
*KR	CARD EXTENDER	.025 [.64] SQUARE	.235 [5.97]	N/A
*KN	CARD EXTENDER	.025 [.64] SQUARE	.605 [15.37]	N/A

CANTILEVER**CANTILEVER CARD EXTENDER**

* KA, KE, KJ, KR, KN have no standoffs, unless requested.

MOUNTING STYLE



.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height Dip Solder/Wire Wrap/Right Angle/Card Extender

PART NUMBER CODING

MATERIALS (Insulator/Contact)

E = PBT/Phosphor Bronze (Standard)
R = PPS/Phosphor Bronze
G = PA9T/Phosphor Bronze
A = PPS/Beryllium Copper
J = PA9T/Beryllium Copper
(Consult Factory For Other Materials)

CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

Contact Surface	Termination
B = .000010" Gold	.000100" Pure Tin, Matte
C = .000030" Gold	.000100" Pure Tin, Matte
G = .000010" Gold	.000005" Gold
Y = .000030" Gold	.000005" Gold
Contact Surface	Overall Plating
S = .000010" Gold	.000010" Gold
M = .000030" Gold	.000010" Gold
E = .000100" Pure Tin, Matte	.000100" Pure Tin, Matte

CONTACT CENTERS

M = .156" [3.96mm]

NUMBER OF CONTACT POSITIONS

See Chart Below

READOUT (Opposite Page)

D = Dual
H = Half Loaded

E B M 43 D CM H - Sxxx

MODIFICATION CODE (Consult Factory)

OMIT FOR STANDARD
-S189 = .200" [5.08mm] Row to Row on Right Angle
-S288* = Card Extender Accepts .062" [1.57] PCB
* Not Required on KR or KN Terminations

MOUNTING STYLE (Opposite Page)

H = Clearance Holes
I = Threaded Inserts
S = Side Mounting
N = No Mounting
D, W = Flush Mounting
T, X = Flush Mounting With Threaded Inserts

TERMINATION TYPE (Opposite Page)

Hairpin Bellows - Available with B or C plating and Phosphor Bronze Only

CS = .025" [.64mm] Square Dip Solder
CM = .025 [.64mm] Square Wire Wrap
CA, CB, CC = .025" [.64mm] Square Right Angle
CW, CT = .015" x .025" [.38 x .64] Dip Solder

Loop Bellows

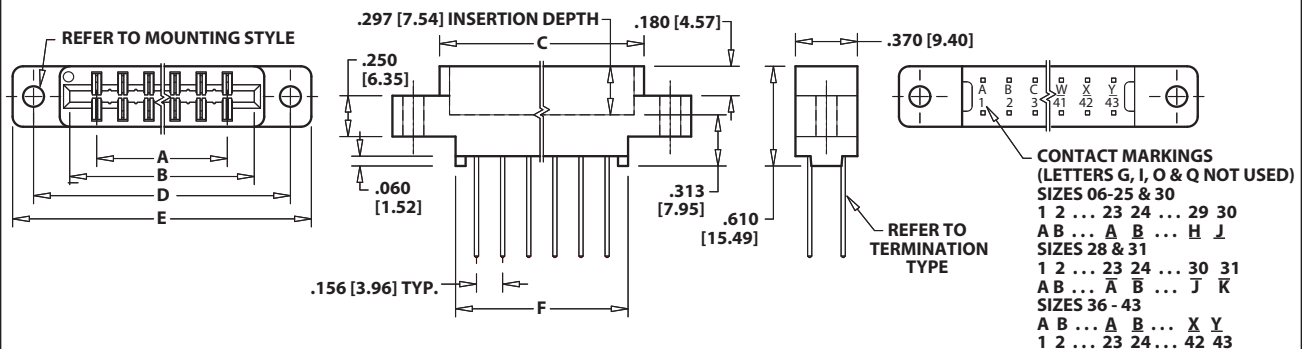
RS = .025" [.64mm] Square Dip Solder
CK, TK = .026" [.66mm] Round Dip Solder
RM = .025" [.64mm] Square Wire Wrap
TA, TB, TM = .025" [.64mm] Square Right Angle

Cantilever Bellows - Available in Y, B, or C Contact Finish Only Not Available with R or A Materials

KS, KD = .025" [.64mm] Square Dip Solder
KM = .025 [.64mm] Square Wire Wrap
KA, KE, KU, KJ = .025" [.64mm] Square Right Angle
KR, KN = .025" [.64mm] Square Card Extender

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.780	1.102	1.221	1.534	1.784	1.030	19.81	27.99	31.01	38.96	45.31	26.16
08/16	1.092	1.414	1.533	1.846	2.096	1.342	27.74	35.92	38.94	46.89	53.24	34.09
10/20	1.404	1.726	1.845	2.158	2.408	1.654	35.66	43.84	46.86	54.81	61.16	42.01
12/24	1.716	2.038	2.157	2.470	2.720	1.966	43.59	51.77	54.79	62.74	69.09	49.94
15/30	2.184	2.506	2.625	2.938	3.188	2.434	55.47	63.65	66.68	74.63	80.98	61.82
18/36	2.652	2.974	3.093	3.406	3.656	2.902	67.36	75.54	78.56	86.51	92.86	73.71
20/40*	2.964	3.286	3.405	3.718	3.968	3.214	75.29	83.46	86.49	94.44	100.79	81.64
22/44	3.276	3.598	3.717	4.030	4.280	3.526	83.21	91.39	94.41	102.36	108.71	89.56
24/48	3.588	3.910	4.029	4.342	4.592	3.838	91.14	99.31	102.34	110.29	116.64	97.49
25/50	3.744	4.066	4.185	4.498	4.748	3.994	95.10	103.28	106.30	114.25	120.60	101.45
28/56	4.212	4.534	4.653	4.966	5.216	4.462	106.98	115.16	118.19	126.14	132.49	113.33
30/60	4.524	4.846	4.965	5.278	5.528	4.774	114.91	123.09	126.11	134.06	140.41	121.26
31/62	4.680	5.002	5.121	5.434	5.684	4.930	118.87	127.05	130.07	138.02	144.37	125.22
36/72	5.460	5.782	5.901	6.214	6.464	5.710	138.68	146.86	149.89	157.84	164.19	145.03
40/80	6.084	6.406	6.525	6.838	7.088	6.334	154.53	162.71	165.74	173.69	180.04	160.88
43/86	6.552	6.874	6.993	7.306	7.556	6.802	166.42	174.60	177.62	185.57	191.92	172.77

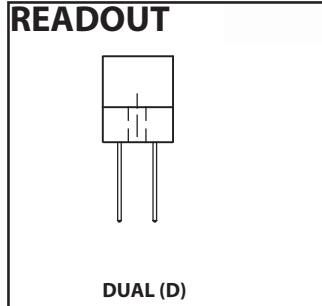
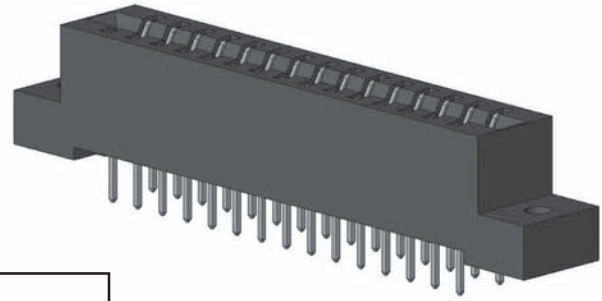
* Consult Factory for availability.



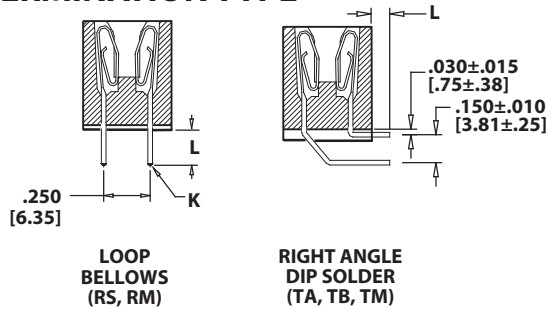
.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height
Dip Solder/Wire Wrap/Right Angle for .093" [2.36] or .125" [3.18] Mating PCB

SPECIFICATIONS

- Accommodates $.093" \pm .008" [2.36 \pm .20]$ or $.125" \pm .008" [3.18 \pm .20]$ mating PCB (Consult factory for $.031" \pm .008" [.79 \pm .20]$ boards)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 amp current rating per contact
- 30 milli ohm maximum at rated current

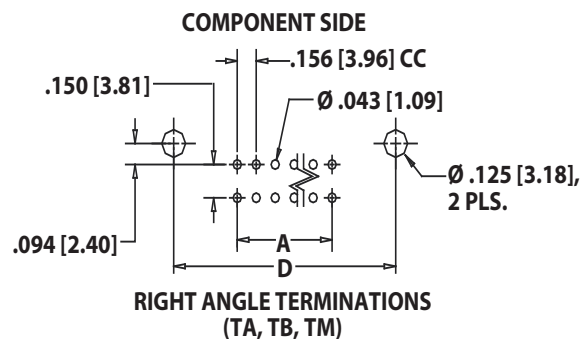
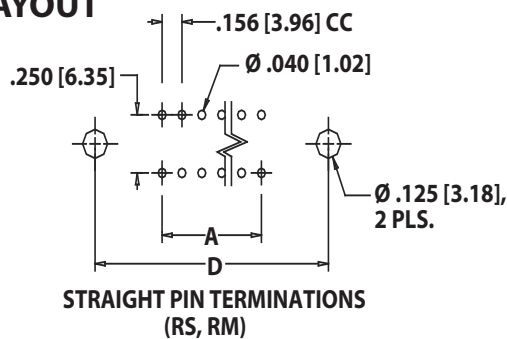


TERMINATION TYPE

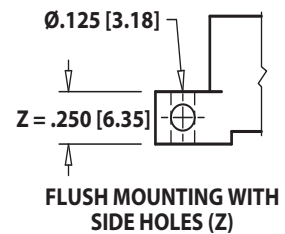
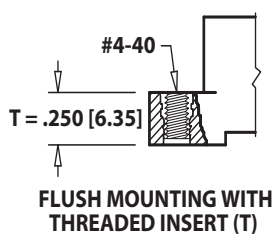
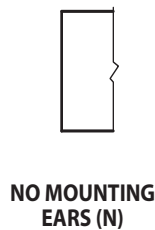
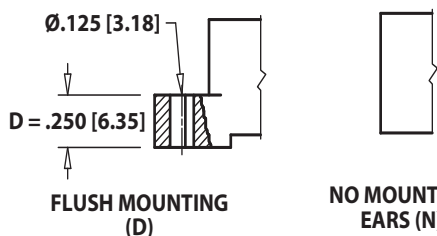


TERMINATION TYPE		POST CROSS SECTION (K)	POST LENGTH L $\pm .025 [.64]$	FITS MIN. HOLE SIZE
RS	Dip Solder	.025 [.64] SQUARE	.190 [4.83]	.040 [1.02]
RM	Wire Wrap	.025 [.64] SQUARE	.560 [14.20]	.040 [1.02]
TA	Right Angle	.025 [.64] SQUARE	.100 [2.54]	.043 [1.09]
TB	Right Angle	.025 [.64] SQUARE	.180 [4.57]	.043 [1.09]
TM	Right Angle	.025 [.64] SQUARE	.250 [6.35]	.043 [1.09]

PCB LAYOUT



MOUNTING STYLE





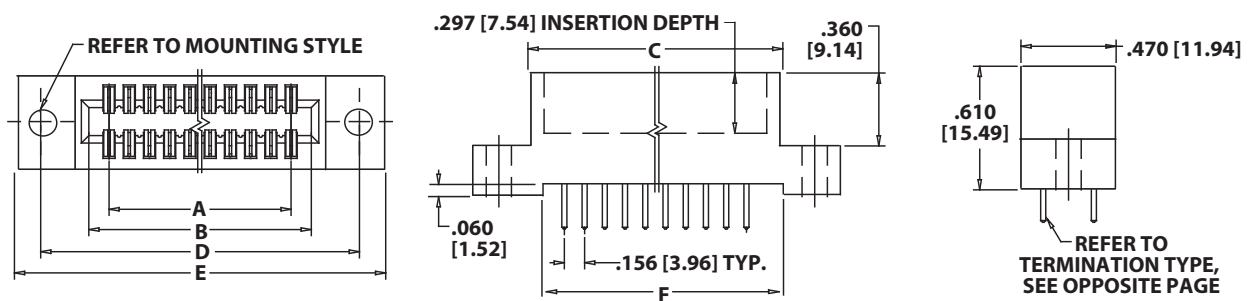
.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height
Dip Solder/Wire Wrap/Right Angle for .093" [2.36] or .125" [3.18] Mating PCB

PART NUMBER CODING

MATERIALS (Insulator/Contact)	E	B	M	43	D	RM	D - S273	MODIFICATION CODE (Consult Factory)
E = PBT/Phosphor Bronze (Standard)								-S273 = FOR .093" ± .008" [2.36 ± .20]
R = PPS/Phosphor Bronze								THICK MATING PCB
G = PA9T/Phosphor Bronze								-S664 = FOR .125" ± .008" [3.18 ± .20]
A = PPS/Beryllium Copper								THICK MATING PCB
J = PA9T/Beryllium Copper								
(Consult Factory For Other Materials)								
CONTACT FINISH - RoHS Compliant								MOUNTING STYLE (Opposite Page)
All platings are Lead Free and have .000050" Nickel underplate								N = No Mounting
Contact Surface								D = Flush Mounting
B = .000010" Gold								T = Flush Mounting With Threaded Inserts
C = .000030" Gold								Z = Flush Mounting With Side Holes
G = .000010" Gold								
Y = .000030" Gold								TERMINATION TYPE (Opposite Page)
Overall Plating								RS = .025" [.64mm] Square Dip Solder
S = .000010" Gold								RM = .025" [.64mm] Square Wire Wrap
M = .000030" Gold								TA, TB, TM = .025" [.64mm] Square Right Angle
E = .000100" Pure Tin, Matte								
								READOUT (Opposite Page)
								D = Dual
CONTACT CENTERS								NUMBER OF CONTACT POSITIONS
M = .156" [3.96mm]								See Chart Below

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



Tolerances with PPS Insulator Material may vary slightly due to shrinkage differential; Consult Factory.

POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.780	1.102	1.221	1.534	1.784	1.104	19.81	27.99	31.01	38.96	45.31	28.04
08/16	1.092	1.414	1.533	1.846	2.096	1.416	27.74	35.92	38.94	46.89	53.24	35.97
10/20	1.404	1.726	1.845	2.158	2.408	1.728	35.66	43.84	46.86	54.81	61.16	43.89
12/24	1.716	2.038	2.157	2.470	2.720	2.040	43.59	51.77	54.79	62.74	69.09	51.82
15/30	2.184	2.506	2.625	2.938	3.188	2.508	55.47	63.65	66.68	74.63	80.98	63.70
18/36*	2.652	2.974	3.093	3.406	3.656	2.976	67.36	75.54	78.56	86.51	92.86	75.59
20/40*	2.964	3.286	3.405	3.718	3.968	3.288	75.29	83.46	86.49	94.44	100.79	83.52
22/44	3.276	3.598	3.717	4.030	4.280	3.600	83.21	91.39	94.41	102.36	108.71	91.44
24/48*	3.588	3.910	4.029	4.342	4.592	3.912	91.14	99.31	102.34	110.29	116.64	99.37
25/50*	3.744	4.066	4.185	4.498	4.748	4.068	95.10	103.28	106.30	114.25	120.60	103.33
28/56*	4.212	4.534	4.653	4.966	5.216	4.536	106.98	115.16	118.19	126.14	132.49	115.21
30/60*	4.524	4.846	4.965	5.278	5.528	4.848	114.91	123.09	126.11	134.06	140.41	123.14
31/62*	4.680	5.002	5.121	5.434	5.684	5.004	118.87	127.05	130.07	138.02	144.37	127.10
32/64	4.836	5.158	5.277	5.590	5.840	5.160	122.83	131.01	134.04	141.99	148.34	131.06
36/72	5.460	5.782	5.901	6.214	6.464	5.784	138.68	146.86	149.89	157.84	164.19	146.91
40/80*	6.084	6.406	6.525	6.838	7.088	6.408	154.53	162.71	165.74	173.69	180.04	162.76
43/86*	6.552	6.874	6.993	7.306	7.556	6.876	166.42	174.60	177.62	185.57	191.92	174.65

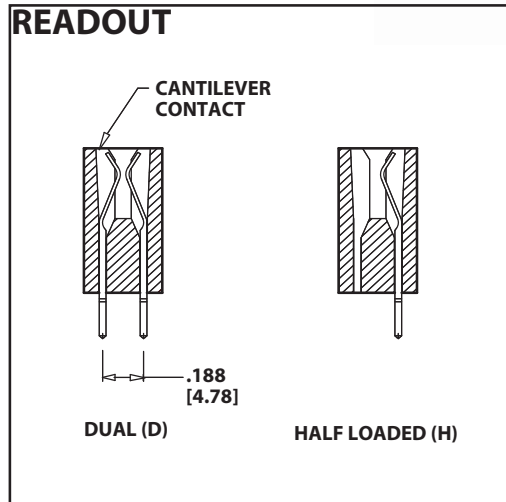
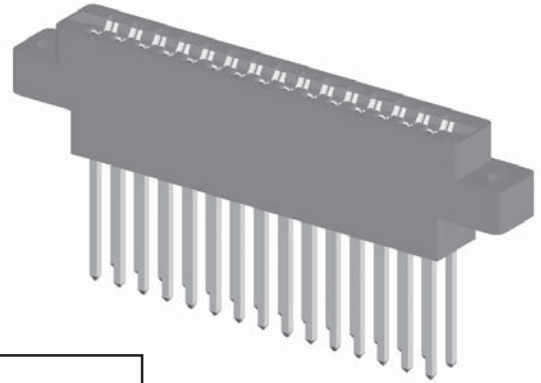
* Consult Factory for availability.



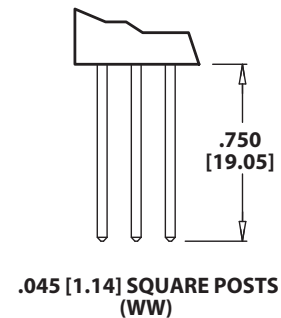
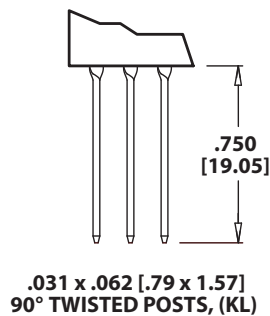
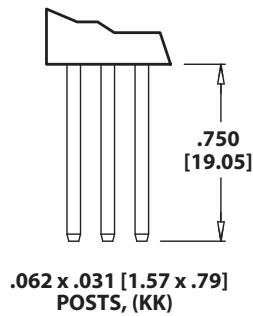
**.156" [3.96 mm] Contact Centers, .720" [18.29 mm] Insulator Height
.045" [1.14 mm] square / .031" [.79 mm] x .062" [1.57 mm] Wire Wrap**

SPECIFICATIONS

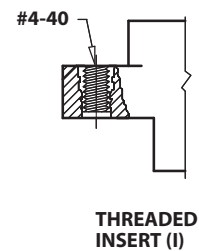
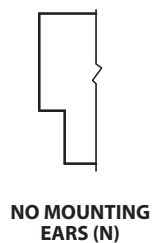
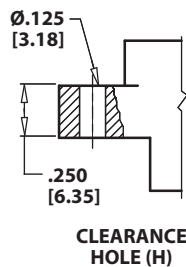
- Accommodates .062" $\pm$.008" [1.57 $\pm$.20] PC board
- PBT insulator
- Molded-in key available
- In Between Contact Key use PLC-K1, see page 142 (sold separately)
- 5 amp current rating per contact
- 30 milli ohm maximum at rated current



TERMINATION TYPE



MOUNTING STYLE





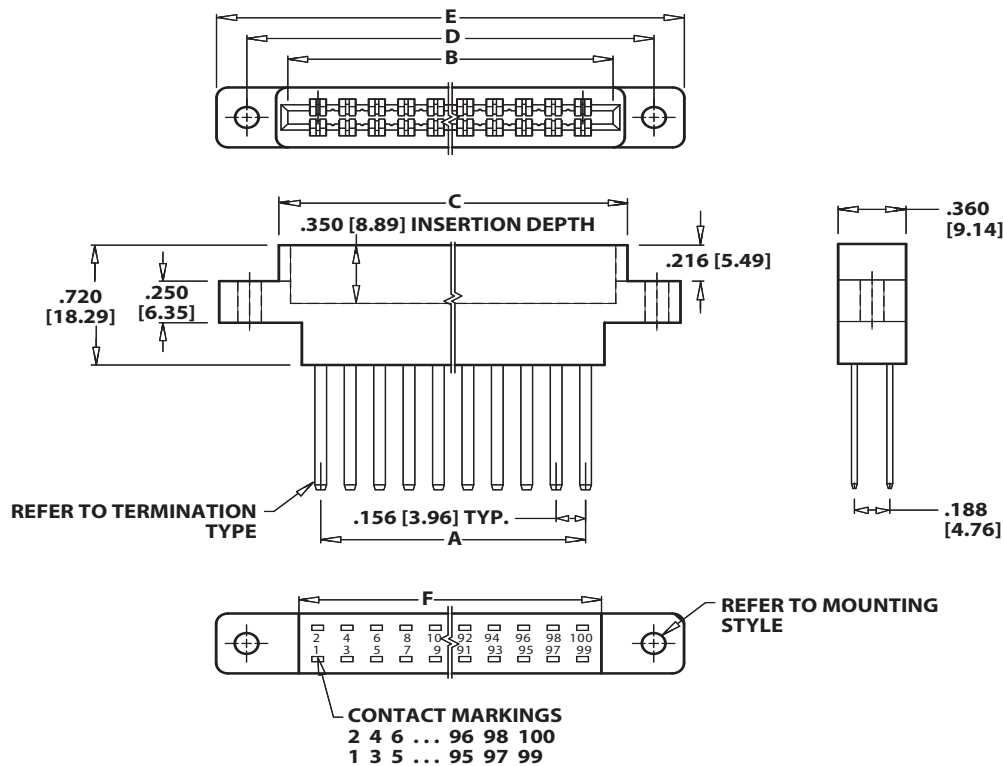
**.156" [3.96mm] Contact Centers, .720" [18.29 mm] Insulator Height
.045" [1.14 mm] square / .031" [.79 mm] x .062" [1.57 mm] Wire Wrap**

PART NUMBER CODING

MATERIALS (Insulator/Contact)	E	B	M	43	D	KK	H	- Sxxx	MODIFICATION CODE (Consult Factory) OMIT FOR STANDARD
E = PBT/Phosphor Bronze (Standard) (Consult Factory For Other Materials)									
CONTACT FINISH - RoHS Compliant									
All platings are Lead Free and have .000050" Nickel underplate									
Contact Surface									MOUNTING STYLE (Opposite page)
B = .000010" Gold									H = Clearance Hole
C = .000030" Gold									N = No Mounting
G = .000010" Gold									I = Threaded Inserts
Y = .000030" Gold									TERMINATION TYPE (Opposite Page)
Contact Surface									KK = .031" [.79mm] x .062" [1.57mm] Post
S = .000010" Gold									KL = .031" [.79mm] x .062" [1.57mm] Post, Twisted 90°
M = .000030" Gold									WW = .045" [1.14mm] Square Post
E = .000100" Pure Tin, Matte									READOUT (Opposite Page)
									D = Dual Row
									H = Half Loaded
CONTACT CENTERS									NUMBER OF CONTACT POSITIONS See Chart Below
M = .156" [3.96mm]									

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12*	0.780	1.100	1.224	1.534	1.784	0.980	19.81	27.94	31.09	38.96	45.31	24.89
10/20	1.404	1.724	1.848	2.158	2.408	1.604	35.66	43.79	46.94	54.81	61.16	40.74
12/24	1.716	2.036	2.160	2.470	2.720	1.916	43.59	51.71	54.86	62.74	69.09	48.67
15/30	2.184	2.504	2.628	2.938	3.188	2.384	55.47	63.60	66.75	74.63	80.98	60.55
18/36	2.652	2.972	3.096	3.406	3.656	2.852	67.36	75.49	78.64	86.51	92.86	72.44
22/44	3.276	3.596	3.720	4.030	4.280	3.476	83.21	91.34	94.49	102.36	108.71	88.29
25/50*	3.744	4.064	4.188	4.498	4.748	3.944	95.10	103.23	106.38	114.25	120.60	100.18
28/56	4.212	4.532	4.656	4.966	5.216	4.412	106.98	115.11	118.26	126.14	132.49	112.06
30/60*	4.524	4.844	4.968	5.278	5.528	4.724	114.91	123.04	126.19	134.06	140.41	119.99
31/62*	4.680	5.000	5.124	5.434	5.684	4.880	118.87	127.00	130.15	138.02	144.37	123.95
36/72	5.460	5.780	5.904	6.214	6.464	5.660	138.68	146.81	149.96	157.84	164.19	143.76
43/86*	6.552	6.872	6.996	7.306	7.556	6.752	166.42	174.55	177.70	185.57	191.92	171.50
50/100*	7.644	7.964	8.088	8.398	8.648	7.844	194.16	202.29	205.44	213.31	219.66	199.24

* Consult Factory for availability.



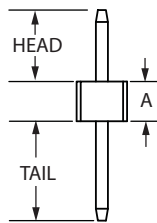
1.00 mm [.039"] Male Headers, Straight, Right Angle, SMT

SPECIFICATIONS

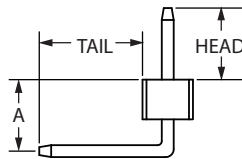
- 1 amp current rating
- UL Flammability Rating: 94V-0
- Insulator Material: Black LCP
- Contact Material: Phosphor Bronze
- Insulator Resistance: 1000 Mega OHMS Min.
- Contact Resistance: 20 Milli OHMS Max.
- Dielectric Withstanding: AC 300V
- Operating Temperature: -40°C to +125°C
- Processing Temperature: 260°C for 10 seconds Max.
- Mates with Female SFM series



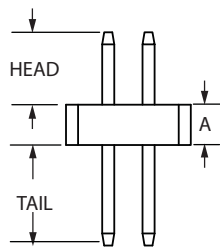
TERMINATION TYPE



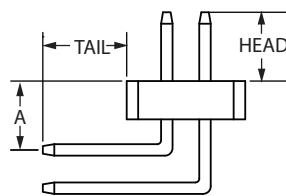
Straight, (ST)



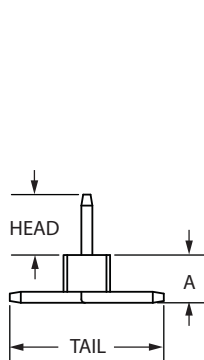
Right Angle, (RA)



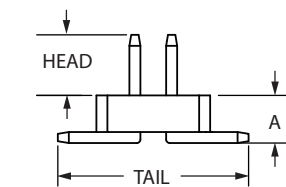
Straight, (ST)



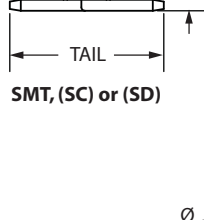
Right Angle, (RA)



SMT, (SC) or (SD)



SMT Without Guide Posts, (SM)



Ø .60 [.024"]

SMT With Guide Posts, (SP)

SINGLE ROW

EXAMPLE P/N	HEAD	TAIL	A
STRAIGHT TERMINATION			
SMH100-LPPE-S10-ST-BK	1.80 [.071"]	2.50 [.098"]	1.00 [.039"]
RIGHT ANGLE TERMINATION			
SMH100-LPPE-S10-RA-BK	1.80 [.071"]	2.60 [.102"]	1.80 [.071"]

DUAL ROW

EXAMPLE P/N	HEAD	TAIL	A
STRAIGHT TERMINATIONS			
SMH100-LPPE-D10-ST-BK	1.80 [.071"]	2.50 [.098"]	1.00 [.039"]
SMH150-LPPE-D10-ST-BK	1.80 [.071"]	2.50 [.098"]	1.50 [.059"]
RIGHT ANGLE TERMINATION			
SMH100-LPPE-D10-RA-BK	1.80 [.071"]	2.60 [.102"]	1.80 [.071"]

SURFACE MOUNT TERMINATIONS

EXAMPLE P/N	HEAD	TAIL	A
SINGLE ROW			
SMH100-LPPE-S10-SC-BK	1.65 [.065"]	4.20 [.165"]	1.30 [.051"]
SMH100-LPPE-S10-SD-BK	1.65 [.065"]	4.20 [.165"]	1.30 [.051"]
DUAL ROW			
SMH101-LPPE-D10-SM-BK	1.65 [.065"]	5.20 [.205"]	1.30 [.051"]
SMH101-LPPE-D10-SP-BK	1.65 [.065"]	5.20 [.205"]	1.30 [.051"]
SMH102-LPPE-D10-SM-BK	1.90 [.075"]	5.20 [.205"]	1.30 [.051"]
SMH102-LPPE-D10-SP-BK	1.90 [.075"]	5.20 [.205"]	1.30 [.051"]
SMH151-LPPE-D10-SM-BK	1.65 [.065"]	5.20 [.205"]	1.80 [.071"]
SMH151-LPPE-D10-SP-BK	1.65 [.065"]	5.20 [.205"]	1.80 [.071"]
SMH152-LPPE-D10-SM-BK	1.90 [.075"]	5.20 [.205"]	1.80 [.071"]
SMH152-LPPE-D10-SP-BK	1.90 [.075"]	5.20 [.205"]	1.80 [.071"]

1.00 mm [.039"] Male Headers, Straight, Right Angle, SMT

PART NUMBER OPTIONS

SMH100 - L P P E - S 10 - ST - BK

SERIES (See Opposite Page)

SMH100 = 1.00 mm [.039"] Profile, 1.80 mm [.071"] Head Height
SMH101 = 1.00 mm [.039"] Profile, 1.65 mm [.065"] Head Height
SMH102 = 1.00 mm [.039"] Profile, 1.90 mm [.075"] Head Height
SMH150 = 1.50 mm [.059"] Profile, 1.80 mm [.071"] Head Height
SMH151 = 1.50 mm [.059"] Profile, 1.65 mm [.065"] Head Height
SMH152 = 1.50 mm [.059"] Profile, 1.90 mm [.075"] Head Height

HOUSING MATERIAL

L = LCP

CONTACT MATERIAL

P = Phosphor Bronze

CONTACT FINISH - RoHS Compliant

P = Gold Flash Overall

S = 10u" Gold Overall

CONTACT CENTERS

E = 1.00 mm [.039"]

COLOR

BK = Black

TERMINATION TYPE (See Opposite Page)

ST = Straight (1 & 2 Row)

RA = Right Angle (1 & 2 Row)

SC = Surface Mount, Standard (1 Row)

SD = Surface Mount, Opposite Bend,

Applicable on Even pin Counts (1 Row)

SM = Surface Mount without Guide Posts (2 Row)

SP = Surface Mount with Guide Posts (2 Row)

NUMBER OF CONTACT POSITIONS (Pins per Row)

02 thru 50

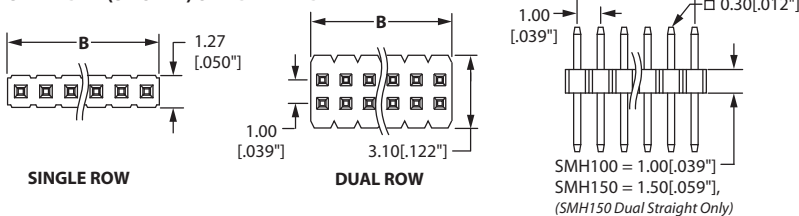
NUMBER OF ROWS

S = Single Row

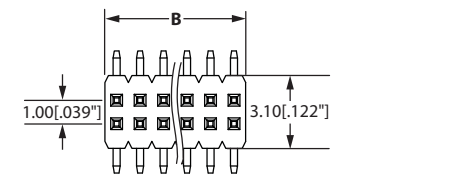
D = Dual Row

DIMENSIONS

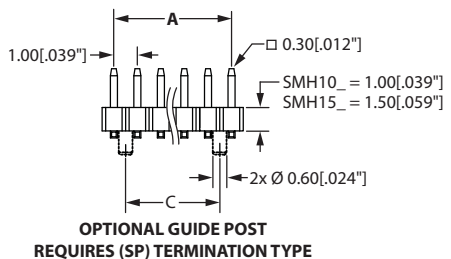
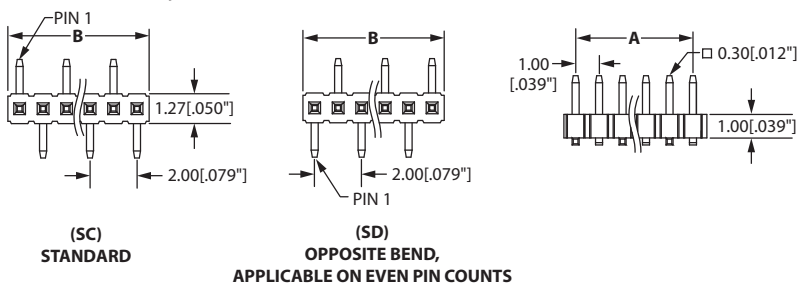
STRAIGHT (SHOWN) & RIGHT ANGLE



SURFACE MOUNT, DUAL ROW



SURFACE MOUNT, SINGLE ROW



Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C		Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C	
		mm	[Inches]	mm	[Inches]	mm	[Inches]			mm	[Inches]	mm	[Inches]	mm	[Inches]
02*	02/04	1.00	0.039	2.00	0.079	N/A	N/A	26	26/52	25.00	0.984	26.00	1.024	24.00	0.945
03	03/06	2.00	0.079	3.00	0.118	1.00	0.039	27	27/54	26.00	1.024	27.00	1.063	25.00	0.984
04	04/08	3.00	0.118	4.00	0.157	2.00	0.079	28	28/56	27.00	1.063	28.00	1.102	26.00	1.024
05	05/10	4.00	0.157	5.00	0.197	3.00	0.118	29	29/58	28.00	1.102	29.00	1.142	27.00	1.063
06	06/12	5.00	0.197	6.00	0.236	4.00	0.157	30	30/60	29.00	1.142	30.00	1.181	28.00	1.102
07	07/14	6.00	0.236	7.00	0.276	5.00	0.197	31	31/62	30.00	1.181	31.00	1.220	29.00	1.142
08	08/16	7.00	0.276	8.00	0.315	6.00	0.236	32	32/64	31.00	1.220	32.00	1.260	30.00	1.181
09	09/18	8.00	0.315	9.00	0.354	7.00	0.276	33	33/66	32.00	1.260	33.00	1.299	31.00	1.220
10	10/20	9.00	0.354	10.00	0.394	8.00	0.315	34	34/68	33.00	1.299	34.00	1.339	32.00	1.260
11	11/22	10.00	0.394	11.00	0.433	9.00	0.354	35	35/70	34.00	1.339	35.00	1.378	33.00	1.299
12	12/24	11.00	0.433	12.00	0.472	10.00	0.394	36	36/72	35.00	1.378	36.00	1.417	34.00	1.339
13	13/26	12.00	0.472	13.00	0.512	11.00	0.433	37	37/74	36.00	1.417	37.00	1.457	35.00	1.378
14	14/28	13.00	0.512	14.00	0.551	12.00	0.472	38	38/76	37.00	1.457	38.00	1.496	36.00	1.417
15	15/30	14.00	0.551	15.00	0.591	13.00	0.512	39	39/78	38.00	1.496	39.00	1.535	37.00	1.457
16	16/32	15.00	0.591	16.00	0.630	14.00	0.551	40	40/80	39.00	1.535	40.00	1.575	38.00	1.496
17	17/34	16.00	0.630	17.00	0.669	15.00	0.591	41	41/82	40.00	1.575	41.00	1.614	39.00	1.535
18	18/36	17.00	0.669	18.00	0.709	16.00	0.630	42	42/84	41.00	1.614	42.00	1.654	40.00	1.575
19	19/38	18.00	0.709	19.00	0.748	17.00	0.669	43	43/86	42.00	1.654	43.00	1.693	41.00	1.614
20	20/40	19.00	0.748	20.00	0.787	18.00	0.709	44	44/88	43.00	1.693	44.00	1.732	42.00	1.654
21	21/42	20.00	0.787	21.00	0.827	19.00	0.748	45	45/90	44.00	1.732	45.00	1.772	43.00	1.693
22	22/44	21.00	0.827	22.00	0.866	20.00	0.787	46	46/92	45.00	1.772	46.00	1.811	44.00	1.732
23	23/46	22.00	0.866	23.00	0.906	21.00	0.827	47	47/94	46.00	1.811	47.00	1.850	45.00	1.772
24	24/48	23.00	0.906	24.00	0.945	22.00	0.866	48	48/96	47.00	1.850	48.00	1.890	46.00	1.811
25	25/50	24.00	0.945	25.00	0.984	23.00	0.906	49	49/98	48.00	1.890	49.00	1.929	47.00	1.850
								50	50/100	49.00	1.929	50.00	1.969	48.00	1.890

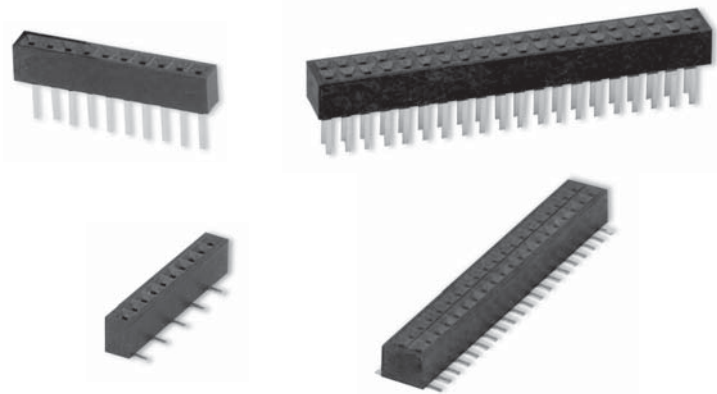
* Position 2 not available with Guide posts.



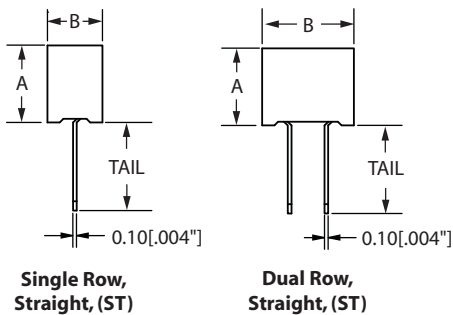
1.00 mm [.039"] Female Headers, Straight & SMT

SPECIFICATIONS

- 1 amp current rating
- UL Flammability Rating: 94V-0
- Insulator Material: Black LCP
- Contact Material: Phosphor Bronze
- Contact Resistance: 20 Milli OHMS Max.
- Operating Temperature: -40°C to +125°C
- Processing Temperature: 260°C for 10 seconds Max.
- Mates with Male SMH series

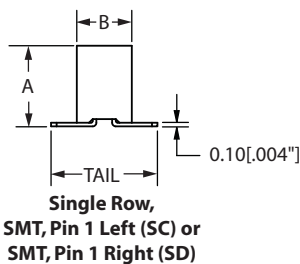


TERMINATION TYPE

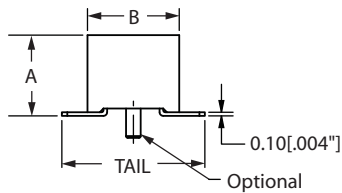


Single Row,
Straight, (ST)

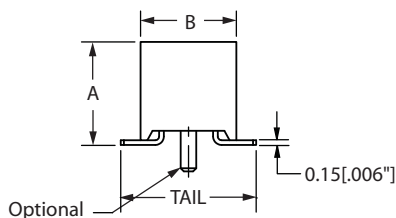
Dual Row,
Straight, (ST)



Single Row,
SMT, Pin 1 Left (SC) or
SMT, Pin 1 Right (SD)



SFM210-, Dual Row,
SMT Without Guide Posts (SM)
or SMT With Guide Posts (SP)



SFM315-, Dual Row,
SMT Without Guide Posts (SM)
or SMT With Guide Posts (SP)

STRAIGHT

EXAMPLE P/N	A	B	TAIL
SINGLE ROW			
SFM210-LPPE-S10-ST-BK	2.10 [.083"]	1.50 [.059"]	2.40 [.094"]
DUAL ROW			
SFM210-LPPE-D10-ST-BK	2.10 [.083"]	2.50 [.098"]	2.40 [.094"]

SURFACE MOUNT

EXAMPLE P/N	A	B	TAIL
SINGLE ROW			
SFM210-LPPE-S10-SC-BK	2.20 [.087"]	1.50 [.059"]	2.90 [.114"]
SFM210-LPPE-S10-SD-BK	2.20 [.087"]	1.50 [.059"]	2.90 [.114"]

SURFACE MOUNT

EXAMPLE P/N	A	B	TAIL
DUAL ROW			
SFM210-LPPE-D10-SM-BK	2.20 [.087"]	2.50 [.098"]	3.90 [.154"]
SFM210-LPPE-D10-SP-BK	2.20 [.087"]	2.50 [.098"]	3.90 [.154"]

SURFACE MOUNT

EXAMPLE P/N	A	B	TAIL
DUAL ROW			
SFM315-LPPE-D10-SM-BK	3.30 [.130"]	3.07 [.121"]	4.34 [.171"]
SFM315-LPPE-D10-SP-BK	3.30 [.130"]	3.07 [.121"]	4.34 [.171"]

1.00 mm [.039"] Female Headers, Straight & SMT

PART NUMBER OPTIONS

SFM210 - L P P E - S 10 - ST - BK

SERIES (See Opposite Page)

SFM210 = 2.10 mm [.083"] Profile
SFM315 = 3.15 mm [.124"] Profile

HOUSING MATERIAL

L = LCP

CONTACT MATERIAL

P = Phosphor Bronze

CONTACT FINISH - RoHS Compliant

P = Gold Flash Overall
S = 10u" Gold Overall, (Not Available on SFM315 series)
G = 10u" Gold on Contact Surface, Gold Flash on Termination, (Not Available on SFM210 series)

CONTACT CENTERS

E = 1.00 mm [.039"]

COLOR

BK = Black

TERMINATION TYPE (See Opposite Page)

ST = Straight (1 & 2 Row)
SC = Surface Mount, Standard (1 Row)
SD = Surface Mount, Opposite Bend, Applicable on Even pin Counts (1 Row)
SM = Surface Mount without Guide Posts (2 Row)
SP = Surface Mount with Guide Posts (2 Row)

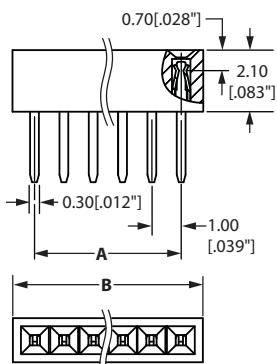
NUMBER OF CONTACT POSITIONS (Pins per Row)
02 thru 50

NUMBER OF ROWS

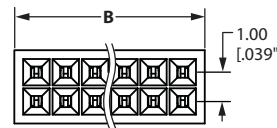
S = Single Row
D = Dual Row

DIMENSIONS

STRAIGHT

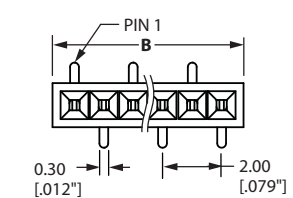


SINGLE ROW

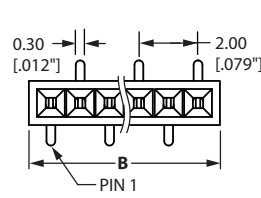


DUAL ROW

SURFACE MOUNT, SINGLE ROW

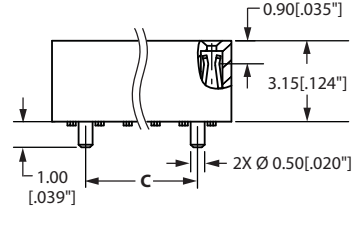
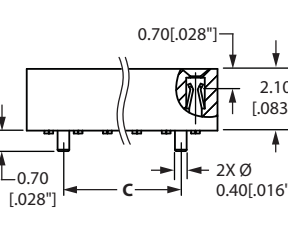
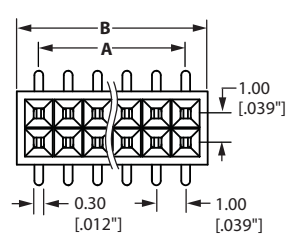


(SC) STANDARD



(SD) OPPOSITE BEND, APPLICABLE ON EVEN PIN COUNTS

SURFACE MOUNT, DUAL ROW



SFM210-

SFM315-

OPTIONAL GUIDE POSTS REQUIRE (SP) TERMINATION TYPE

No. of Contacts Single/ Dual	DIMENSION A		DIMENSION B (SFM210)		DIMENSION B (SFM315)		DIMENSION C	
	mm	[inch]	mm	[inch]	mm	[inch]	mm	[inch]
02/04*	1.00	0.039	2.50	0.098	2.40	0.094	N/A	N/A
03/06	2.00	0.079	3.50	0.138	3.40	0.134	1.00	0.039
04/08	3.00	0.118	4.50	0.177	4.40	0.173	2.00	0.079
05/10	4.00	0.157	5.50	0.217	5.40	0.213	3.00	0.118
06/12	5.00	0.197	6.50	0.256	6.40	0.252	4.00	0.157
07/14	6.00	0.236	7.50	0.295	7.40	0.291	5.00	0.197
08/16	7.00	0.276	8.50	0.335	8.40	0.331	6.00	0.236
09/18	8.00	0.315	9.50	0.374	9.40	0.370	7.00	0.276
10/20	9.00	0.354	10.50	0.413	10.40	0.409	8.00	0.315
11/22	10.00	0.394	11.50	0.453	11.40	0.449	9.00	0.354
12/24	11.00	0.433	12.50	0.492	12.40	0.488	10.00	0.394
13/26	12.00	0.472	13.50	0.531	13.40	0.528	11.00	0.433
14/28	13.00	0.512	14.50	0.571	14.40	0.567	12.00	0.472
15/30	14.00	0.551	15.50	0.610	15.40	0.606	13.00	0.512
16/32	15.00	0.591	16.50	0.650	16.40	0.646	14.00	0.551
17/34	16.00	0.630	17.50	0.689	17.40	0.685	15.00	0.591
18/36	17.00	0.669	18.50	0.728	18.40	0.724	16.00	0.630
19/38	18.00	0.709	19.50	0.768	19.40	0.764	17.00	0.669
20/40**	19.00	0.748	20.50	0.807	20.40	0.803	18.00	0.709
21/42	20.00	0.787	21.50	0.846	21.40	0.843	19.00	0.748
22/44	21.00	0.827	22.50	0.886	22.40	0.882	20.00	0.787
23/46	22.00	0.866	23.50	0.925	23.40	0.921	21.00	0.827
24/48	23.00	0.906	24.50	0.965	24.40	0.961	22.00	0.866
25/50	24.00	0.945	25.50	1.004	25.40	1.000	23.00	0.906
26/52	25.00	0.984	26.50	1.043	26.40	1.039	24.00	0.945
27/54	26.00	1.024	27.50	1.083	27.40	1.079	25.00	0.984
28/56	27.00	1.063	28.50	1.122	28.40	1.118	26.00	1.024
29/58	28.00	1.102	29.50	1.161	29.40	1.157	27.00	1.063
30/60	29.00	1.142	30.50	1.201	30.40	1.197	28.00	1.102
31/62	30.00	1.181	31.50	1.240	31.40	1.236	29.00	1.142
32/64	31.00	1.220	32.50	1.280	32.40	1.276	30.00	1.181
33/66	32.00	1.260	33.50	1.319	33.40	1.315	31.00	1.220
34/68	33.00	1.299	34.50	1.358	34.40	1.354	32.00	1.260
35/70	34.00	1.339	35.50	1.398	35.40	1.394	33.00	1.299
36/72	35.00	1.378	36.50	1.437	36.40	1.433	34.00	1.339
37/74	36.00	1.417	37.50	1.476	37.40	1.472	35.00	1.378
38/76	37.00	1.457	38.50	1.516	38.40	1.512	36.00	1.417
39/78	38.00	1.496	39.50	1.555	39.40	1.551	37.00	1.457
40/80	39.00	1.535	40.50	1.594	40.40	1.591	38.00	1.496
41/82	40.00	1.575	41.50	1.634	41.40	1.630	39.00	1.535
42/84	41.00	1.614	42.50	1.673	42.40	1.669	40.00	1.575
43/86	42.00	1.654	43.50	1.713	43.40	1.709	41.00	1.614
44/88	43.00	1.693	44.50	1.752	44.40	1.748	42.00	1.654
45/90	44.00	1.732	45.50	1.791	45.40	1.787	43.00	1.693
46/92	45.00	1.772	46.50	1.831	46.40	1.827	44.00	1.732
47/94	46.00	1.811	47.50	1.870	47.40	1.866	45.00	1.772
48/96	47.00	1.850	48.50	1.909	48.40	1.906	46.00	1.811
49/98	48.00	1.890	49.50	1.949	49.40	1.945	47.00	1.850
50/100	49.00	1.929	50.50	1.988	50.40	1.984	48.00	1.890

* Position 2 not available with guide posts on SFM210 Series (Termination Type SP).

** Position 20 not available on SFM315 Series.



**.050" [1.27 mm] Contact Centers, Male Header,
Dip Solder/Right Angle/SMT**

SPECIFICATIONS

- Insulator Material: Nylon 9T
- Contact Material: Brass
- Plating: Overall Gold Flash
- 1 amp current rating per contact
- UL Flammability Rating: 94V-O

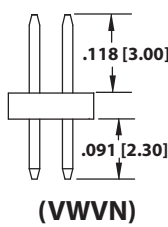
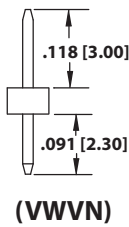


TERMINATION TYPE

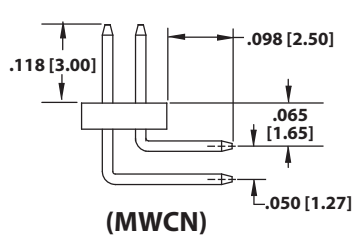
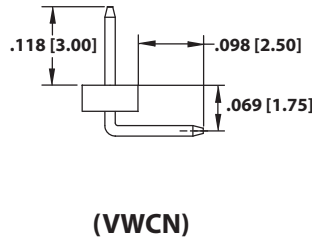
SINGLE READOUT

DUAL READOUT

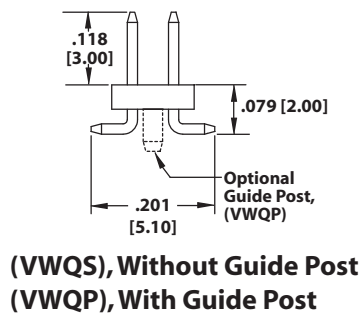
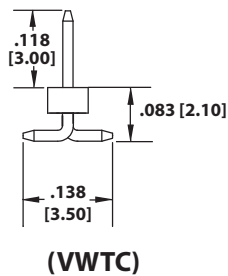
STRAIGHT



RIGHT ANGLE

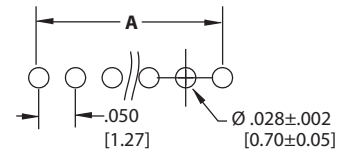


SURFACE MOUNT (SMT)

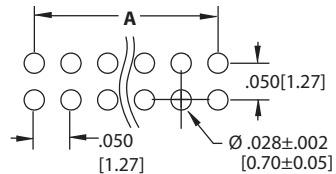


PCB LAYOUT

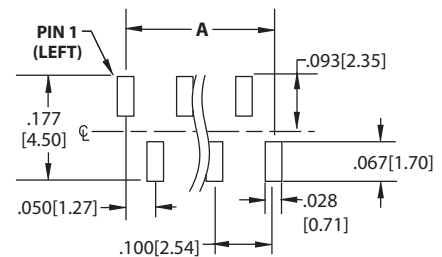
**STRAIGHT (VWV)
RIGHT ANGLE (VWC)**



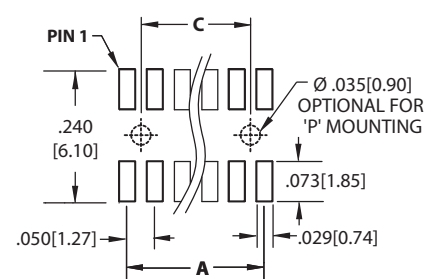
**STRAIGHT (VWV)
RIGHT ANGLE (MWC)**



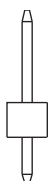
SURFACE MOUNT, PIN 1 LEFT (VWT)



SURFACE MOUNT (VWQ)



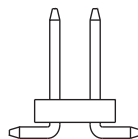
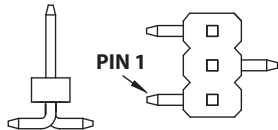
MOUNTING STYLE



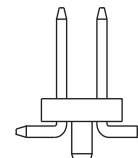
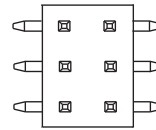
**No Mounting,
(N)**



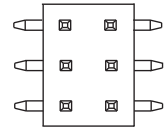
**SMT, Pin 1 Left
(C)**



**SMT, Without Guide Post
(S)**



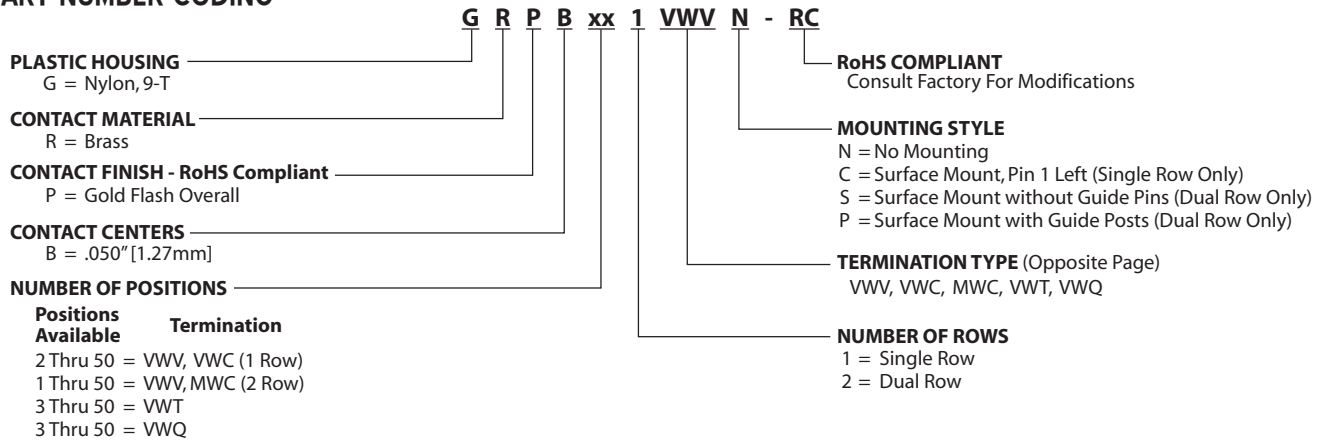
**SMT, With Guide Post
(P)**



**.050" [1.27mm] Contact Centers, Male Header,
Dip Solder/Right Angle/SMT**



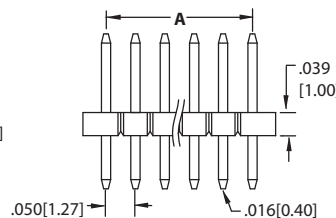
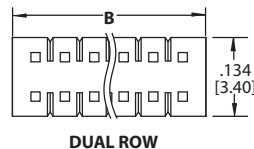
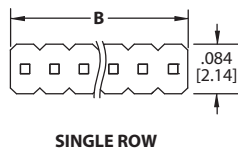
PART NUMBER CODING



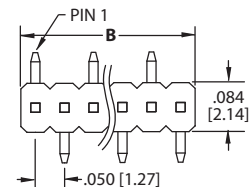
DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

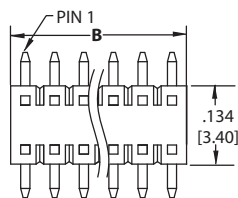
STRAIGHT (SHOWN) & RIGHT ANGLE



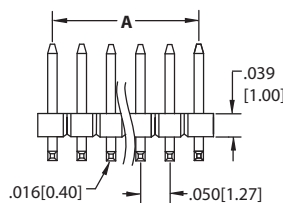
SURFACE MOUNT, PIN 1 LEFT, SINGLE ROW



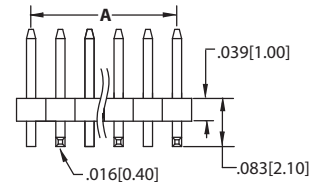
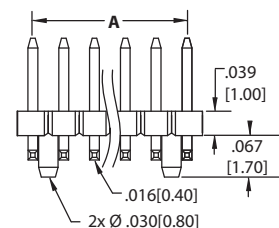
SURFACE MOUNT, DUAL ROW



WITHOUT GUIDE POST, (VWQS)



WITH GUIDE POST, (VWQP)

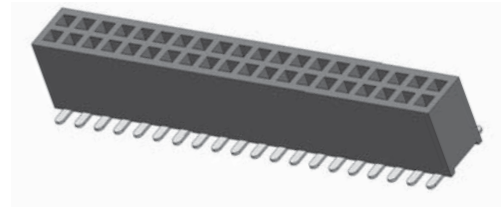
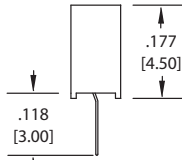
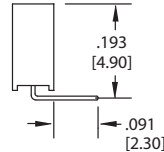
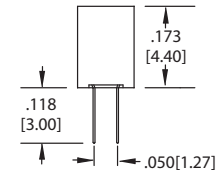
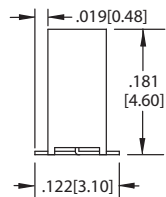
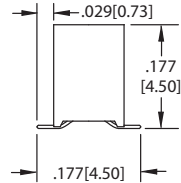
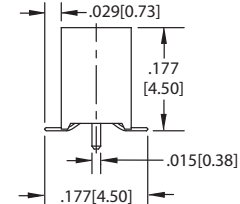
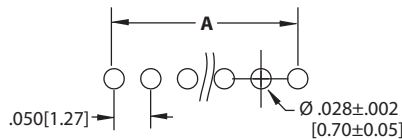
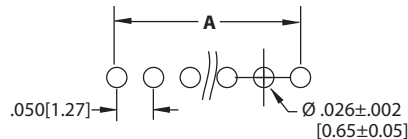
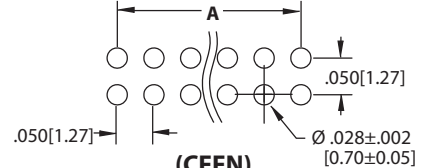
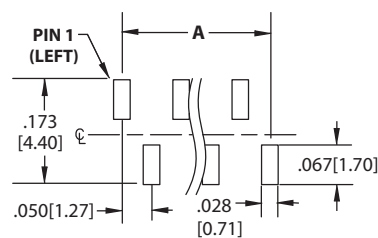
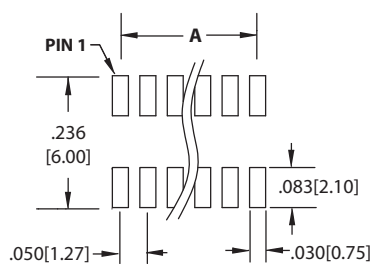
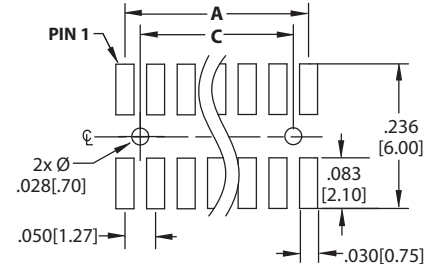
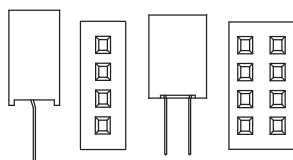
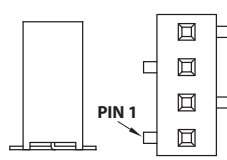
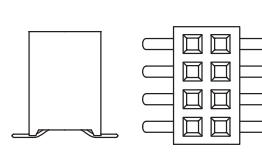
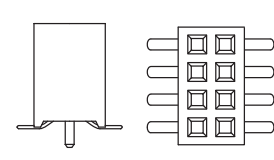


Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C	
		Inches	[mm]	Inches	[mm]	Inches	[mm]
01	01/02	.000	0.00	.050	1.27		
02	02/04	.050	1.27	.100	2.54		
03	03/06	.100	2.54	.150	3.81	.050	1.27
04	04/08	.150	3.81	.200	5.08	.100	2.54
05	05/10	.200	5.08	.250	6.35	.150	3.81
06	06/12	.250	6.35	.300	7.62	.200	5.08
07	07/14	.300	7.62	.350	8.89	.250	6.35
08	08/16	.350	8.89	.400	10.16	.300	7.62
09	09/18	.400	10.16	.450	11.43	.350	8.89
10	10/20	.450	11.43	.500	12.70	.400	10.16
11	11/22	.500	12.70	.550	13.97	.450	11.43
12	12/24	.550	13.97	.600	15.24	.500	12.70
13	13/26	.600	15.24	.650	16.51	.550	13.97
14	14/28	.650	16.51	.700	17.78	.600	15.24
15	15/30	.700	17.78	.750	19.05	.650	16.51
16	16/32	.750	19.05	.800	20.32	.700	17.78
17	17/34	.800	20.32	.850	21.59	.750	19.05
18	18/36	.850	21.59	.900	22.86	.800	20.32
19	19/38	.900	22.86	.950	24.13	.850	21.59
20	20/40	.950	24.13	1.000	25.40	.900	22.86
21	21/42	1.000	25.40	1.050	26.67	.950	24.13
22	22/44	1.050	26.67	1.100	27.94	1.000	25.40
23	23/46	1.100	27.94	1.150	29.21	1.050	26.67
24	24/48	1.150	29.21	1.200	30.48	1.100	27.94
25	25/50	1.200	30.48	1.250	31.75	1.150	29.21

Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C	
		Inches	[mm]	Inches	[mm]	Inches	[mm]
26	26/52	1.250	31.75	1.300	33.02	1.200	30.48
27	27/54	1.300	33.02	1.350	34.29	1.250	31.75
28	28/56	1.350	34.29	1.400	35.56	1.300	33.02
29	29/58	1.400	35.56	1.450	36.83	1.350	34.29
30	30/60	1.450	36.83	1.500	38.10	1.400	35.56
31	31/62	1.500	38.10	1.550	39.37	1.450	36.83
32	32/64	1.550	39.37	1.600	40.64	1.500	38.10
33	33/66	1.600	40.64	1.650	41.91	1.550	39.37
34	34/68	1.650	41.91	1.700	43.18	1.600	40.64
35	35/70	1.700	43.18	1.750	44.45	1.650	41.91
36	36/72	1.750	44.45	1.800	45.72	1.700	43.18
37	37/74	1.800	45.72	1.850	46.99	1.750	44.45
38	38/76	1.850	46.99	1.900	48.26	1.800	45.72
39	39/78	1.900	48.26	1.950	49.53	1.850	46.99
40	40/80	1.950	49.53	2.000	50.80	1.900	48.26
41	41/82	2.000	50.80	2.050	52.07	1.950	49.53
42	42/84	2.050	52.07	2.100	53.34	2.000	50.80
43	43/86	2.100	53.34	2.150	54.61	2.050	52.07
44	44/88	2.150	54.61	2.200	55.88	2.100	53.34
45	45/90	2.200	55.88	2.250	57.15	2.150	54.61
46	46/92	2.250	57.15	2.300	58.42	2.200	55.88
47	47/94	2.300	58.42	2.350	59.69	2.250	57.15
48	48/96	2.350	59.69	2.400	60.96	2.300	58.42
49	49/98	2.400	60.96	2.450	62.23	2.350	59.69
50	50/100	2.450	62.23	2.500	63.50	2.400	60.96

**.050" [1.27 mm] Contact Centers, Female Header,
Dip Solder/Right Angle/SMT****SPECIFICATIONS**

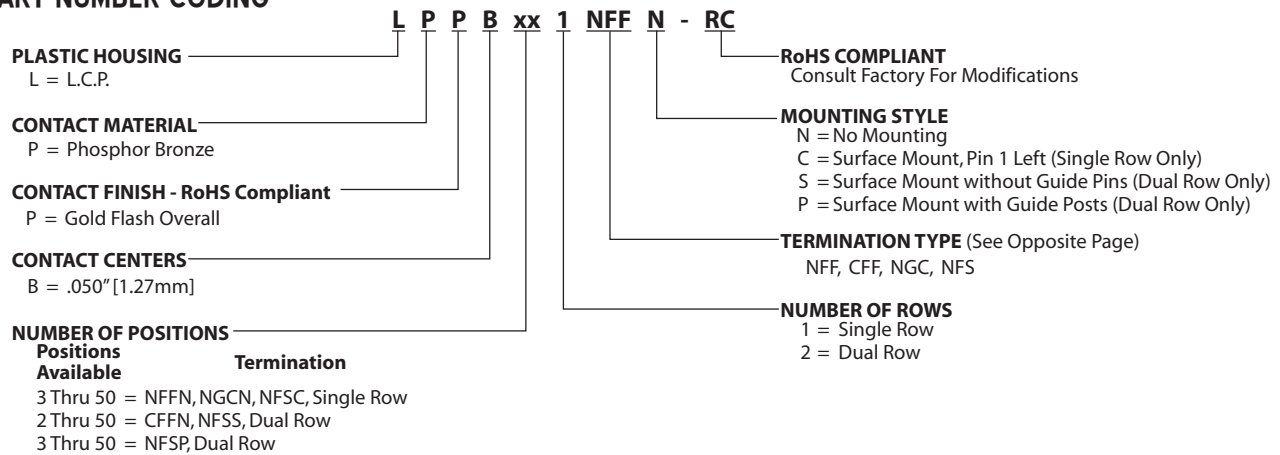
- Insulator Material: L.C.P.
- Contact Material: Phosphor Bronze
- Plating: Overall Gold Flash
- 1 amp current rating per contact
- UL Flammability Rating: 94V-O

**TERMINATION TYPE****SINGLE ROW,
STRAIGHT
(NFFN)****SINGLE ROW,
RIGHT ANGLE
(NGCN)****DUAL ROW,
STRAIGHT
(CFFN)****SINGLE ROW,
SMT
(NFSC)****DUAL ROW,
SMT Without Guide Posts
(NFSS)****DUAL ROW,
SMT With Guide Posts
(NFSP)****PCB LAYOUT****(NFFN)****(NGCN)****(CFFN)****(NFSC)****(NFSS)****(NFSP)****MOUNTING STYLE****SINGLE & DUAL ROW
NO MOUNTING
(N)****SINGLE ROW
SMT, Pin 1 Left
(C)****DUAL ROW
SMT Without Guide Post
(S)****DUAL ROW
SMT With Guide Post
(P)**

**.050" [1.27 mm] Contact Centers, Female Header,
Dip Solder/Right Angle/SMT**

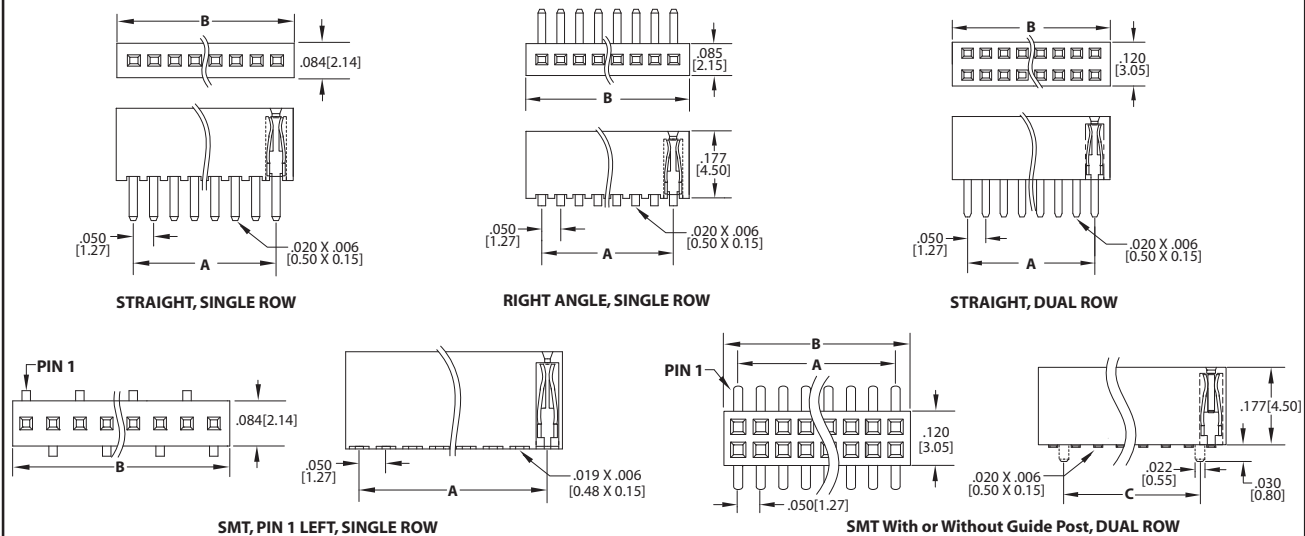


PART NUMBER CODING



DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.

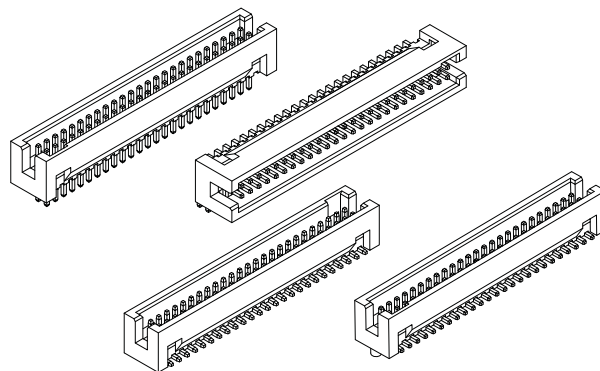


Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C	
		Inches	[mm]	Inches	[mm]	Inches	[mm]
02	2/4	.050	1.27	.115	2.92		
03	3/6	.100	2.54	.165	4.19	.050	1.27
04	4/8	.150	3.81	.215	5.46	.100	2.54
05	5/10	.200	5.08	.265	6.73	.150	3.81
06	6/12	.250	6.35	.315	8.00	.200	5.08
07	7/14	.300	7.62	.365	9.27	.250	6.35
08	8/16	.350	8.89	.415	10.54	.300	7.62
09	9/18	.400	10.16	.465	11.81	.350	8.89
10	10/20	.450	11.43	.515	13.08	.400	10.16
11	11/22	.500	12.70	.565	14.35	.450	11.43
12	12/24	.550	13.97	.615	15.62	.500	12.70
13	13/26	.600	15.24	.665	16.89	.550	13.97
14	14/28	.650	16.51	.715	18.16	.600	15.24
15	15/30	.700	17.78	.765	19.43	.650	16.51
16	16/32	.750	19.05	.815	20.70	.700	17.78
17	17/34	.800	20.32	.865	21.97	.750	19.05
18	18/36	.850	21.59	.915	23.24	.800	20.32
19	19/38	.900	22.86	.965	24.51	.850	21.59
20	20/40	.950	24.13	1.015	25.78	.900	22.86
21	21/42	1.000	25.40	1.065	27.05	.950	24.13
22	22/44	1.050	26.67	1.115	28.32	1.000	25.40
23	23/46	1.100	27.94	1.165	29.59	1.050	26.67
24	24/48	1.150	29.21	1.215	30.86	1.100	27.94
25	25/50	1.200	30.48	1.265	32.13	1.150	29.21

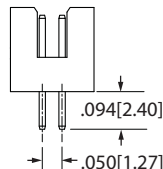
Positions	Number of Contacts Single/Dual	DIMENSION A		DIMENSION B		DIMENSION C	
		Inches	[mm]	Inches	[mm]	Inches	[mm]
26	26/52	1.250	31.75	1.315	33.40	1.200	30.48
27	27/54	1.300	33.02	1.365	34.67	1.250	31.75
28	28/56	1.350	34.29	1.415	35.94	1.300	33.02
29	29/58	1.400	35.56	1.465	37.21	1.350	34.29
30	30/60	1.450	36.83	1.515	38.48	1.400	35.56
31	31/62	1.500	38.10	1.565	39.75	1.450	36.83
32	32/64	1.550	39.37	1.615	41.02	1.500	38.10
33	33/66	1.600	40.64	1.665	42.29	1.550	39.37
34	34/68	1.650	41.91	1.715	43.56	1.600	40.64
35	35/70	1.700	43.18	1.765	44.83	1.650	41.91
36	36/72	1.750	44.45	1.815	46.10	1.700	43.18
37	37/74	1.800	45.72	1.865	47.37	1.750	44.45
38	38/76	1.850	46.99	1.915	48.64	1.800	45.70
39	39/78	1.900	48.26	1.965	49.91	1.850	46.99
40	40/80	1.950	49.53	2.015	51.18	1.900	48.26
41	41/82	2.000	50.80	2.065	52.45	1.950	49.53
42	42/84	2.050	52.07	2.115	53.72	2.000	50.80
43	43/86	2.100	53.34	2.165	54.99	2.050	52.07
44	44/88	2.150	54.61	2.215	56.26	2.100	53.34
45	45/90	2.200	55.88	2.265	57.53	2.150	54.61
46	46/92	2.250	57.15	2.315	58.80	2.200	55.88
47	47/94	2.300	58.42	2.365	60.07	2.250	57.15
48	48/96	2.350	59.69	2.415	61.34	2.300	58.42
49	49/98	2.400	60.96	2.465	62.61	2.350	59.69
50	50/100	2.450	62.23	2.515	63.88	2.400	60.96

**.050" [1.27] Male Shrouded Box Headers, Straight, Right Angle, SMT With or Without Post****SPECIFICATIONS**

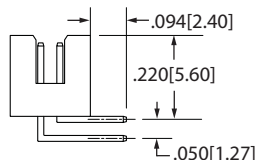
- **Centered Polarizing Notch**
- Operating Temperature: - 40° C to + 85° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 1 AMP per contact
- Voltage Drop: AC 500 V.
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SFH31 series (See opposite page)**

**PART NUMBER OPTIONS**

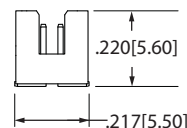
SERIES	SBH31 - N B P B - D 10 - ST - BK	COLOR
SBH31 = Male Box Header with Centered Polarizing Notch, .050" [1.27mm] Contact Centers		BK = Black Other Color Options Available (Consult Factory)
HOUSING MATERIAL		TERMINATION TYPE
N = Nylon 6T		ST = Straight RA = Right Angle SM = Surface Mount SP = Surface Mount with Post
CONTACT MATERIAL		NUMBER OF CONTACT POSITIONS (Pins per Row)
B = Brass		05 thru 50
CONTACT FINISH - RoHS Compliant		NUMBER OF ROWS
P = Gold Flash Overall		D = Dual Row
CONTACT CENTERS		
B = .050" [1.27mm]		

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com**STRAIGHT (ST)**

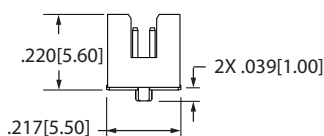
Example P/N: SBH31-NBPB-D20-ST-BK

**RIGHT ANGLE (RA)**

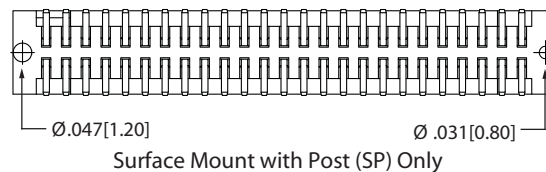
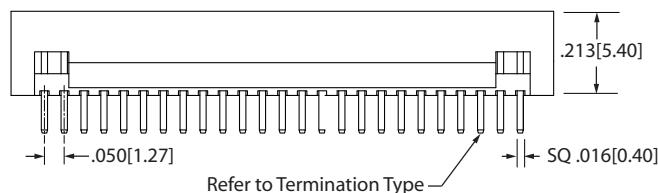
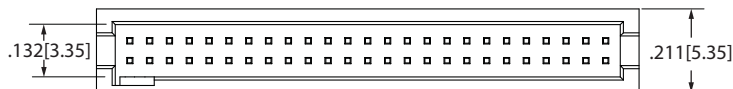
Example P/N: SBH31-NBPB-D20-RA-BK

**SURFACE MOUNT (SM)**

Example P/N: SBH31-NBPB-D20-SM-BK

**SURFACE MOUNT with POST (SP)**

Example P/N: SBH31-NBPB-D20-SP-BK

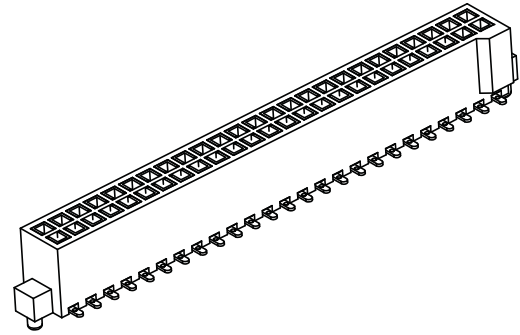


Surface Mount with Post (SP) Only



SPECIFICATIONS

- Operating Temperature: - 40° C to + 85° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 3 AMP per contact
- Dielectric Withstanding: 500 VAC
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SBH31 series (See opposite page)**



PART NUMBER OPTIONS

SFH31 - N P P B - D 10 - SP - BK

SERIES

SFH31 = Female Box Header Without Strain Relief,
.050" [1.27mm] Contact Centers

HOUSING MATERIAL

N = Nylon 6T

CONTACT MATERIAL

P = Phosphor Bronze

CONTACT FINISH - RoHS Compliant

P = Gold Flash Overall

E = .000100" Pure Tin, Matte, Overall

COLOR

BK = Black

GY = Grey

TERMINATION TYPE (Opposite Page)

SP = Surface Mount with Post

NUMBER OF CONTACT POSITIONS

03 thru 50

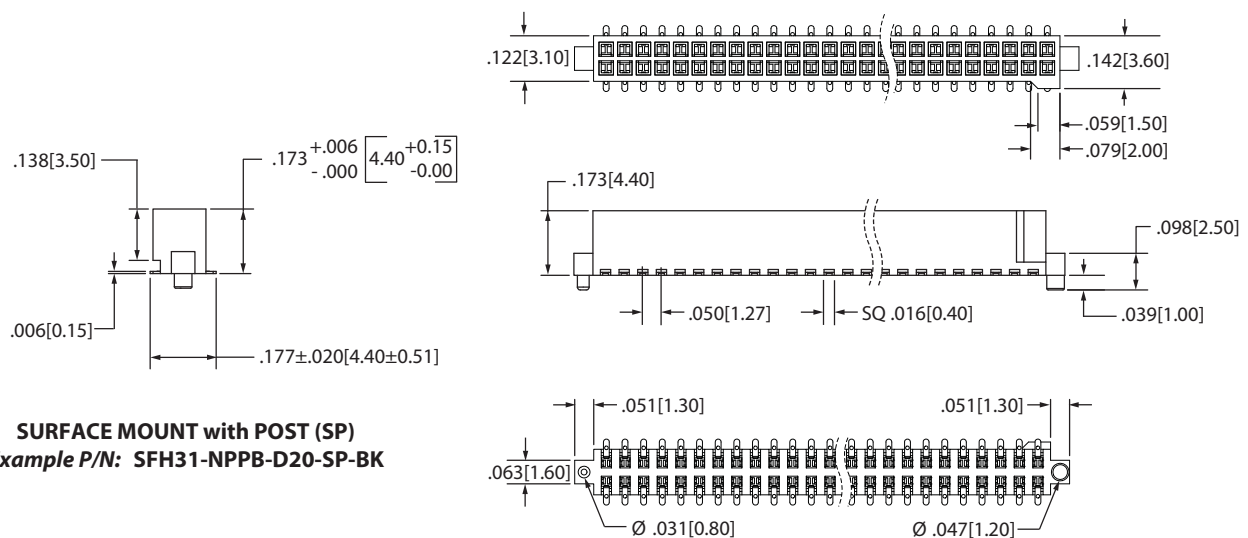
NUMBER OF ROWS

D = Dual Row

CONTACT CENTERS

B = .050" [1.27mm]

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com

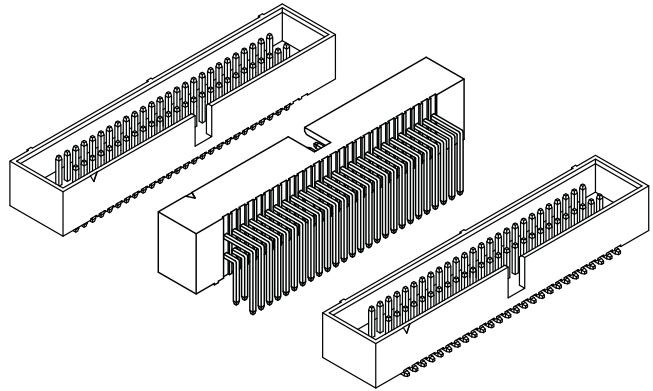




.050" [1.27] Male Shrouded Box Headers, .100" [2.54] Row Spacing, Straight, Right Angle, SMT With or Without Post

SPECIFICATIONS

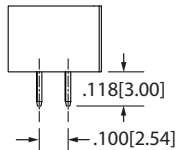
- **Centered Polarizing Notch**
- Operating Temperature: - 40° C to + 85° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 1 AMP per contact
- Voltage Drop: AC 500 V.
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SFH41 series (See opposite page)**



PART NUMBER OPTIONS

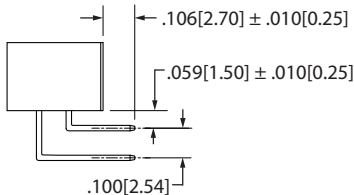
SERIES	SBH41 - N B P B - D 10 - ST - BK	COLOR
SBH41 = Male Box Header with Centered Polarizing Notch, .050" [1.27mm] Contact Centers		BK = Black Other Color Options Available (Consult Factory)
HOUSING MATERIAL		TERMINATION TYPE
N = Nylon 6T		ST = Straight RA = Right Angle SM = Surface Mount SP = Surface Mount with Post
CONTACT MATERIAL		NUMBER OF CONTACT POSITIONS (Pins per Row)
B = Brass		05 thru 40
CONTACT FINISH - RoHS Compliant		NUMBER OF ROWS
P = Gold Flash Overall		D = Dual Row
CONTACT CENTERS		
B = .050" [1.27mm]		

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com



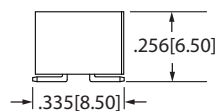
STRAIGHT (ST)

Example P/N: SBH41-NBPB-D20-ST-BK



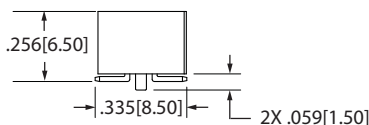
RIGHT ANGLE (RA)

Example P/N: SBH41-NBPB-D20-RA-BK



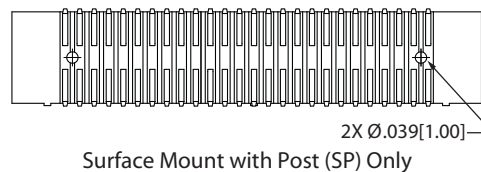
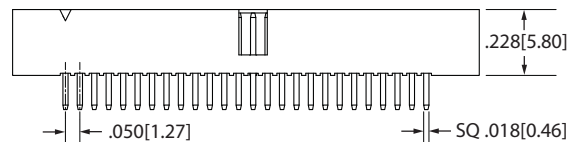
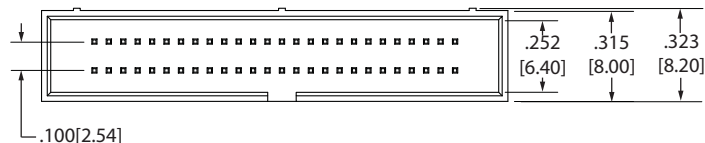
SURFACE MOUNT (SM)

Example P/N: SBH41-NBPB-D20-SM-BK



SURFACE MOUNT with POST (SP)

Example P/N: SBH41-NBPB-D20-SP-BK



Surface Mount with Post (SP) Only



**.050" [1.27] IDC Sockets, .100" [2.54] Row Spacing,
Insulation Displacement With or Without Strain Relief**

SPECIFICATIONS

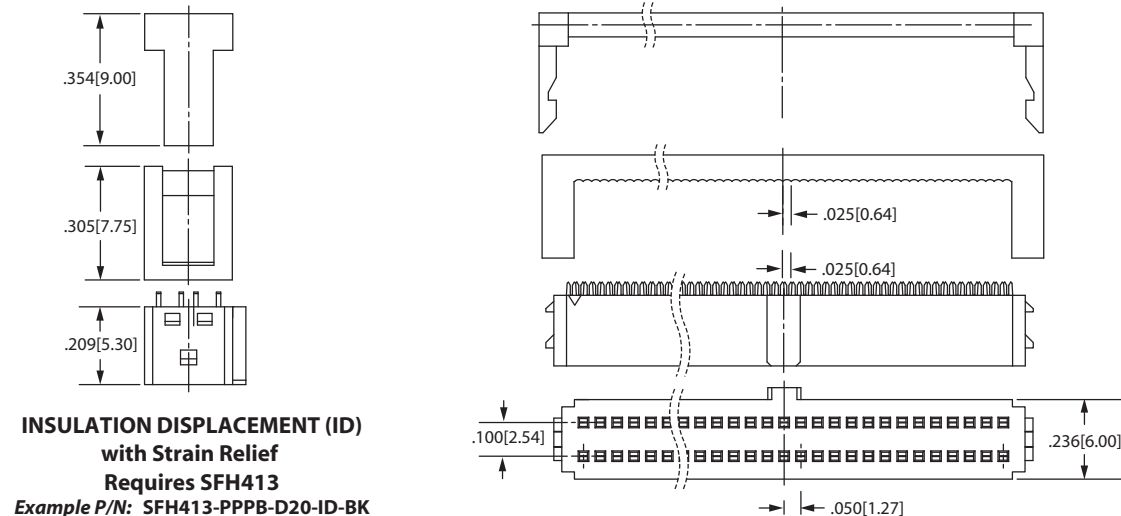
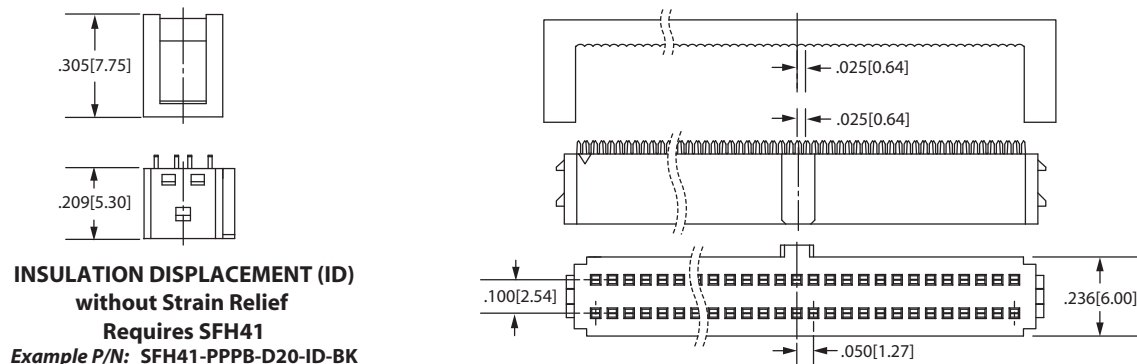
- **Centered Polarizing Key**
- Operating Temperature: - 40° C to + 105° C
- UL Flammability Rating: 94V-0
- Contact Resistance: 30 MEGA OHMS Max.
- Current Rating: 1 AMP per contact
- Dielectric Withstanding: 500 VAC R.M.S. for One Minute
- Insulation Resistance: 500 Mega OHMS
- **Mates with SBH41 series (See opposite page)**



PART NUMBER OPTIONS

SERIES	SFH41	P	P	P	B	D	10	ID	BK	COLOR
SFH41 = Female Box Header Without Strain Relief, .050" [1.27mm] Contact Centers										BK = Black
SFH413 = Female Box Header With Strain Relief, .050" [1.27mm] Contact Centers										GY = Grey
HOUSING MATERIAL										TERMINATION TYPE (Opposite Page)
P = PBT										ID = Insulation Displacement
CONTACT MATERIAL										NUMBER OF CONTACT POSITIONS
P = Phosphor Bronze										05, 08, 10, 13, 15, 17, 20, 25, 30, 34, 40, 50
CONTACT FINISH - RoHS Compliant										NUMBER OF ROWS
P = Gold Flash Overall										D = Dual Row
E = .000100" Pure Tin, Matte, Overall										CONTACT CENTERS
V = Gold Flash on Contact Surface, Nickel Underplate on Tails										B = .050" [1.27mm]

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com





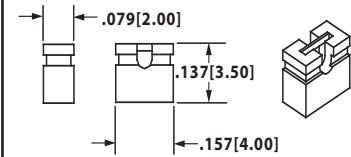
.079" [2 mm] Contact Centers, Male Header Dip Solder/Right Angle/SMT

SPECIFICATIONS

- 1 amp current rating per contact (4 amp for 4 row only)
- UL Flammability Rating: 94V-O
- Insulator: Nylon 6-T
- Contact Material: Brass

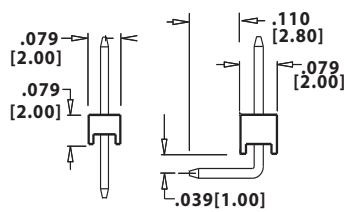


JUMPERS

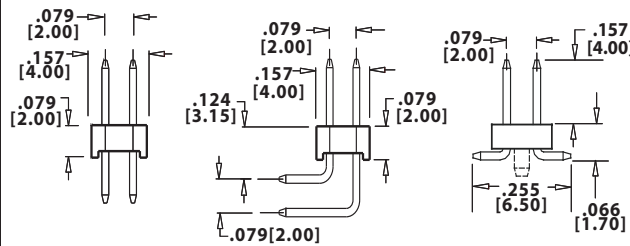


PART NUMBER:
SPN02SYBN-RC (GOLD FLASH)
STN02SYBN-RC (TIN PLATE)

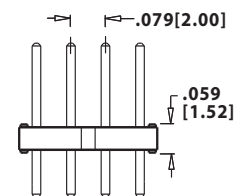
READOUT



SINGLE (1)

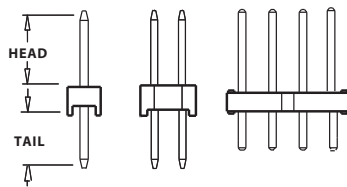


DUAL (2)

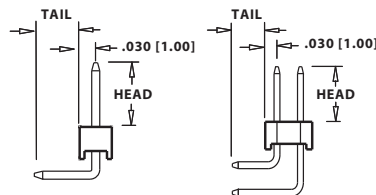


QUAD (4)

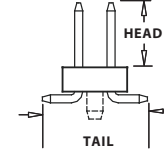
TERMINATION TYPE



STRAIGHT



RIGHT ANGLE



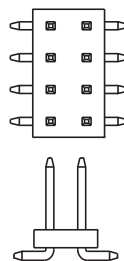
SMT

P/N CODE	ROWS	TERM	HEAD	TAIL	P/N CODE	ROWS	TERM	HEAD	TAIL	P/N CODE	ROWS	TERM	HEAD	TAIL
PAE	1	STRAIGHT	.157" [4.00]	.110" [2.80]	PAR	1	RIGHT ANGLE	.157" [4.00]	.110" [2.80]					
PAE	2	STRAIGHT	.157" [4.00]	.110" [2.80]	PAR	2	RIGHT ANGLE	.157" [4.00]	.110" [2.80]	MAM	2	SMT	.157" [4.00]	.255" [6.50]
RCC	4	STRAIGHT	.173" [4.40]	.094" [2.40]										

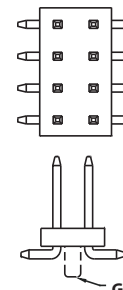
MOUNTING STYLE



No Mounting-
Default Standard (N)



Two Row SMT,
Without Guide Post (S)

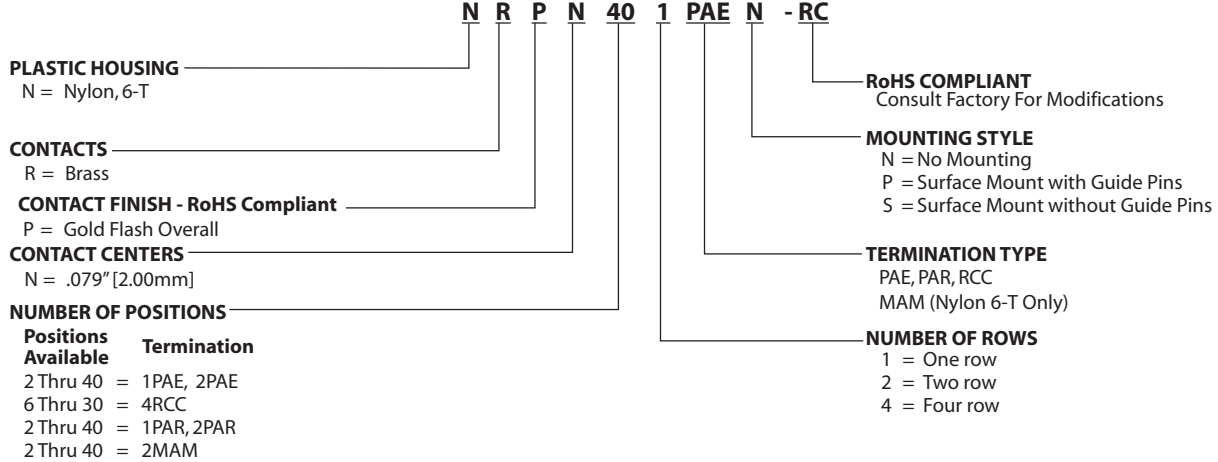


Two Row SMT,
With Guide Post (P)



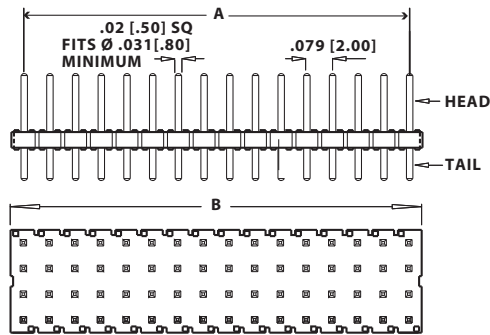
.079" [2 mm] Contact Centers, Male Header
Dip Solder/Right Angle/SMT

PART NUMBER CODING

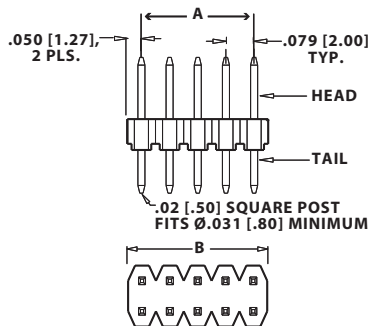


DIMENSIONS

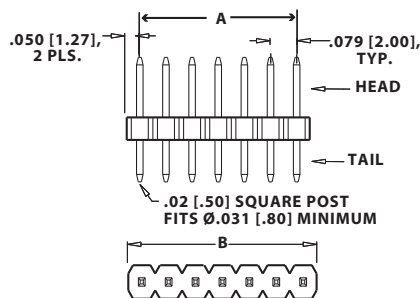
Dimensions in [] are in millimeters, all others are in inches.



**QUAD READOUT,
STRAIGHT TAIL SHOWN**



**DUAL READOUT,
STRAIGHT TAIL SHOWN**



**SINGLE READOUT,
STRAIGHT TAIL SHOWN**

PART NUMBER	NUMBER OF CONTACTS SINGLE/ DUAL/QUAD	DIMENSION A		DIMENSION B	
		INCHES	[MM]	INCHES	[MM]
_ RPN02 ___ N-RC	02/04	0.079	2.00	0.157	4.00
_ RPN03 ___ N-RC	03/06	0.157	4.00	0.236	6.00
_ RPN04 ___ N-RC	04/08	0.236	6.00	0.315	8.00
_ RPN05 ___ N-RC	05/10	0.315	8.00	0.394	10.00
_ RPN06 ___ N-RC	06/12/24	0.394	10.00	0.472	12.00
_ RPN07 ___ N-RC	07/14/28	0.472	12.00	0.551	14.00
_ RPN08 ___ N-RC	08/16/32	0.551	14.00	0.630	16.00
_ RPN09 ___ N-RC	09/18/36	0.630	16.00	0.709	18.00
_ RPN10 ___ N-RC	10/20/40	0.709	18.00	0.787	20.00
_ RPN11 ___ N-RC	11/22/44	0.787	20.00	0.866	22.00
_ RPN12 ___ N-RC	12/24/48	0.866	22.00	0.945	24.00
_ RPN13 ___ N-RC	13/26/52	0.945	24.00	1.024	26.00
_ RPN14 ___ N-RC	14/28/56	1.024	26.00	1.102	28.00
_ RPN15 ___ N-RC	15/30/60	1.102	28.00	1.181	30.00
_ RPN16 ___ N-RC	16/32/64	1.181	30.00	1.260	32.00
_ RPN17 ___ N-RC	17/34/68	1.260	32.00	1.339	34.00
_ RPN18 ___ N-RC	18/36/72	1.339	34.00	1.417	36.00
_ RPN19 ___ N-RC	19/38/76	1.417	36.00	1.496	38.00
_ RPN20 ___ N-RC	20/40/80	1.496	38.00	1.575	40.00
_ RPN21 ___ N-RC	21/42/84	1.575	40.00	1.654	42.00
_ RPN22 ___ N-RC	22/44/88	1.654	42.00	1.732	44.00
_ RPN23 ___ N-RC	23/46/92	1.732	44.00	1.811	46.00
_ RPN24 ___ N-RC	24/48/96	1.811	46.00	1.890	48.00
_ RPN25 ___ N-RC	25/50/100	1.890	48.00	1.969	50.00
_ RPN26 ___ N-RC	26/52/104	1.969	50.00	2.047	52.00
_ RPN27 ___ N-RC	27/54/108	2.047	52.00	2.126	54.00
_ RPN28 ___ N-RC	28/56/112	2.126	54.00	2.205	56.00
_ RPN29 ___ N-RC	29/58/116	2.205	56.00	2.283	58.00
_ RPN30 ___ N-RC	30/60/120	2.283	58.00	2.362	60.00
_ RPN31 ___ N-RC	31/62	2.362	60.00	2.441	62.00
_ RPN32 ___ N-RC	32/64	2.441	62.00	2.520	64.00
_ RPN33 ___ N-RC	33/66	2.520	64.00	2.598	66.00
_ RPN34 ___ N-RC	34/68	2.598	66.00	2.677	68.00
_ RPN35 ___ N-RC	35/70	2.677	68.00	2.756	70.00
_ RPN36 ___ N-RC	36/72	2.756	70.00	2.835	72.00
_ RPN37 ___ N-RC	37/74	2.835	72.00	2.913	74.00
_ RPN38 ___ N-RC	38/76	2.913	74.00	2.992	76.00
_ RPN39 ___ N-RC	39/78	2.992	76.00	3.071	78.00
_ RPN40 ___ N-RC	40/80	3.071	78.00	3.150	80.00



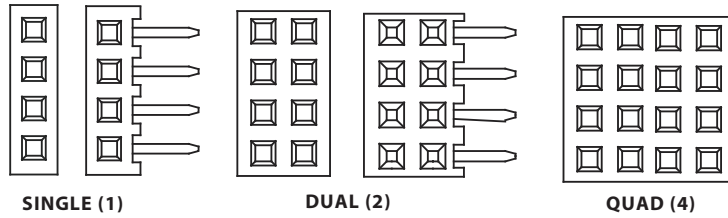
.079" [2 mm] Contact Centers, Female Header Dip Solder/Right Angle/SMT

SPECIFICATIONS

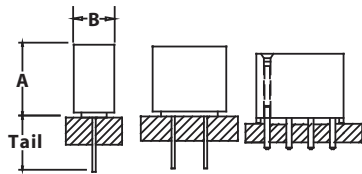
- 1 amp current rating per contact
- UL Flammability Rating: 94V-O
- Insulator: Black Thermoplastic Polyester/Nylon 6-T
- Contact Material: Phosphor Bronze



READOUT

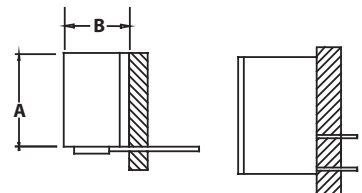


TERMINATION TYPE



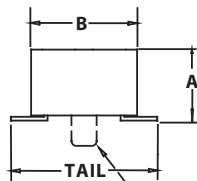
STRAIGHT

P/N CODE	ROWS	TERM	A	B	TAIL
BFC	1	STRAIGHT	.170 [4.30]	.094 [2.40]	.094 [2.40]
AFC	2	STRAIGHT	.170 [4.30]	.157 [4.00]	.094 [2.40]
AFE	2	STRAIGHT	1.70 [4.30]	.181 [4.60]	.110 [2.80]
EFC	4	STRAIGHT	.248 [6.30]	.315 [8.00]	.094 [2.40]



RIGHT ANGLE

P/N CODE	ROWS	TERM	A	B	TAIL
FGG	1	RIGHT ANGLE	.169 [4.30]	.110 [2.80]	.122 [3.10]
FJF	2	RIGHT ANGLE	.285 [7.20]	.191 [4.85]	.118 [3.00]



SMT

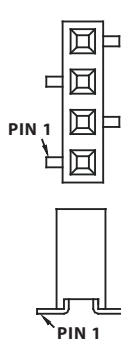
P/N CODE	ROWS	TERM	A	B	TAIL
BFL	1	SMT	.181 [4.60]	.094 [2.40]	.157 [4.00]
GFN	2	SMT	.110 [2.80]	.165 [4.20]	.228 [5.80]
GHN	Replaced by GFN				
FFK	2	SMT	.173 [4.40]	.157 [4.00]	.228 [5.80]

Refer to Mounting Style

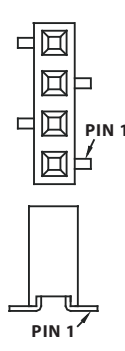
MOUNTING STYLE



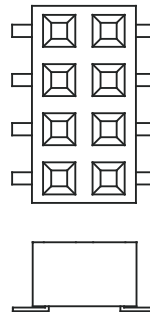
No Mounting-
Standard (N)



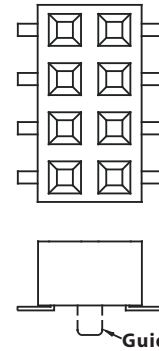
One Row SMT,
Pin 1 Left (C)



One Row SMT,
Pin 1 Right (D)



Two Row SMT,
Without Guide Posts (S)



Two Row SMT,
With Guide Post (P)

**.079" [2 mm] Contact Centers, Female Header
Dip Solder/Right Angle/SMT**



PART NUMBER CODING

PP P N 40 1 BFC N - RC

PLASTIC HOUSING
PP = Thermoplastic/Phosphor Bronze (Thru Hole Only)
NP = Nylon 6-T/Phosphor Bronze (SMT or Thru Hole)

CONTACT FINISH - RoHS Compliant
Contact Termination
P = Gold Flash Gold Flash (For 1 and 2 Row)
R = .000020" Gold .00010" Tin (For 4 row)

CONTACT CENTERS
N = .079" [2.00mm]

NUMBER OF POSITIONS

Positions Available	Termination
2 Thru 40 = 1BFC	
2 Thru 40 = 2AFC	
2 Thru 40 = 2AFE	
6 Thru 30 = 4EFC	
3 Thru 40 = 1FGG	
3 Thru 40 = 2FJF	
3 Thru 40 = 1BFL	
3 Thru 40 = 2GFN	
2 Thru 40 = 2FFK	

RoHS COMPLIANT
Consult Factory For Modifications

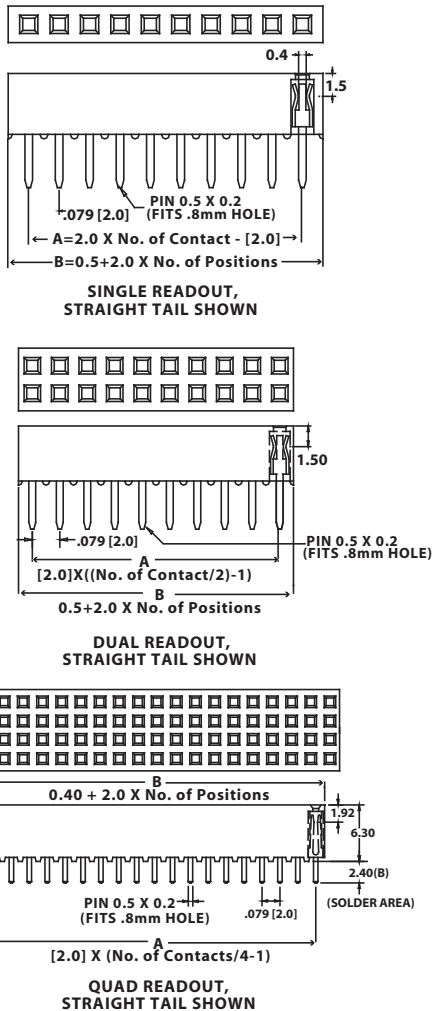
MOUNTING STYLE
N = No Mounting
C = SMT, Single row female, pin 1 Left
D = SMT, Single row female, pin 1 Right
P = Surface mount with guide pins
S = Surface mount without guide pins

TERMINATION TYPE (Opposite Page)
BFC = Thru Hole Top Entry
AFC = Thru Hole Top Entry
AFE = Thru Hole Top Entry/Closed Bottom
EFC = Thru Hole Top Entry
FGG = R/A Top Entry
FJF = R/A Top Entry
BFL = SMT Bottom Entry (Nylon 6-T only)
FFK = SMT Bottom Entry (Nylon 6-T only)
GFN = SMT Top/Bottom Entry (Nylon 6-T only)
GHN = SMT Replaced by GFN

NUMBER OF ROWS (Opposite Page)
1 = One Row
2 = Two Row
4 = Four Row

DIMENSIONS

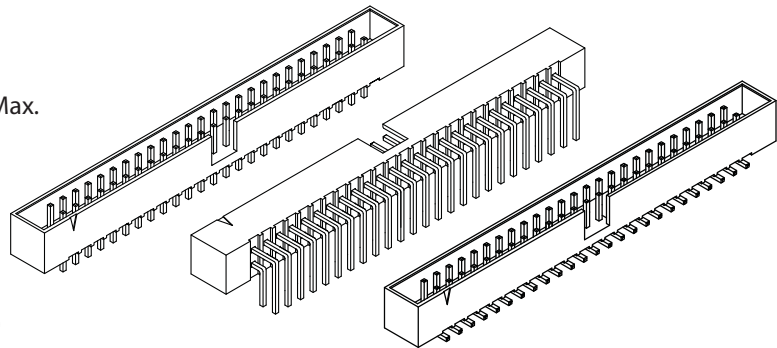
Dimensions in [] are in millimeters, all others are in inches.



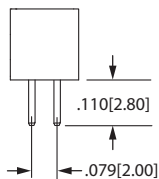
PART NUMBER	NUMBER OF CONTACTS SINGLE/DUAL/ QUAD	CENTER TO CENTER LENGTH [A]		OVERALL LENGTH [B]	
		INCHES	[MM]	INCHES	[MM]
PN01 N-RC	01/02			0.079	2.00
PN02 N-RC	02/04	0.079	2.00	0.157	4.00
PN03 N-RC	03/06	0.157	4.00	0.236	6.00
PN04 N-RC	04/08	0.236	6.00	0.315	8.00
PN05 N-RC	05/10	0.315	8.00	0.394	10.00
PN06 N-RC	06/12/24	0.394	10.00	0.472	12.00
PN07 N-RC	07/14/28	0.472	12.00	0.551	14.00
PN08 N-RC	08/16/32	0.551	14.00	0.630	16.00
PN09 N-RC	09/18/36	0.630	16.00	0.709	18.00
PN10 N-RC	10/20/40	0.709	18.00	0.787	20.00
PN11 N-RC	11/22/44	0.787	20.00	0.866	22.00
PN12 N-RC	12/24/48	0.866	22.00	0.945	24.00
PN13 N-RC	13/26/52	0.945	24.00	1.024	26.00
PN14 N-RC	14/28/54	1.024	26.00	1.102	28.00
PN15 N-RC	15/30/60	1.102	28.00	1.181	30.00
PN16 N-RC	16/32/64	1.181	30.00	1.260	32.00
PN17 N-RC	17/34/68	1.260	32.00	1.339	34.00
PN18 N-RC	18/36/72	1.339	34.00	1.417	36.00
PN19 N-RC	19/38/76	1.417	36.00	1.496	38.00
PN20 N-RC	20/40/80	1.496	38.00	1.575	40.00
PN21 N-RC	21/42/84	1.575	40.00	1.654	42.00
PN22 N-RC	22/44/88	1.654	42.00	1.732	44.00
PN23 N-RC	23/46/92	1.732	44.00	1.811	46.00
PN24 N-RC	24/48/96	1.811	46.00	1.890	48.00
PN25 N-RC	25/50/100	1.890	48.00	1.969	50.00
PN26 N-RC	26/52/104	1.969	50.00	2.047	52.00
PN27 N-RC	27/54/108	2.047	52.00	2.126	54.00
PN28 N-RC	28/56/112	2.126	54.00	2.205	56.00
PN29 N-RC	29/58/116	2.205	56.00	2.283	58.00
PN30 N-RC	30/60/120	2.283	58.00	2.362	60.00
PN31 N-RC	31/62	2.362	60.00	2.441	62.00
PN32 N-RC	32/64	2.441	62.00	2.520	64.00
PN33 N-RC	33/66	2.520	64.00	2.598	66.00
PN34 N-RC	34/68	2.598	66.00	2.677	68.00
PN35 N-RC	35/70	2.677	68.00	2.756	70.00
PN36 N-RC	36/72	2.756	70.00	2.835	72.00
PN37 N-RC	37/74	2.835	72.00	2.913	74.00
PN38 N-RC	38/76	2.913	74.00	2.992	76.00
PN39 N-RC	39/78	2.992	76.00	3.071	78.00
PN40 N-RC	40/80	3.071	78.00	3.150	80.00

**.079" [2.00] Male Shrouded Box Headers, Straight, Right Angle, SMT****SPECIFICATIONS**

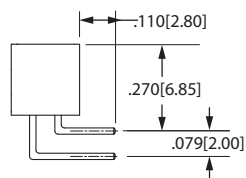
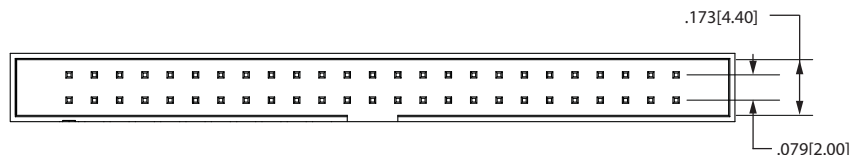
- **Centered Polarizing Notch**
- Operating Temperature: - 40° C to + 85° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 2 AMP per contact
- Voltage Drop: AC 500 V.
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SFH21 series (See opposite page)**

**PART NUMBER OPTIONS**

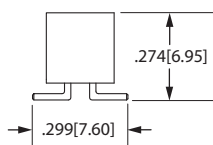
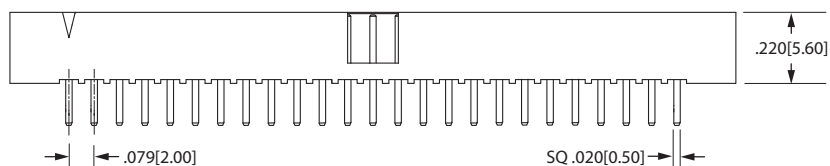
SBH21 - N B P N - D 10 - ST - BK					
SERIES					COLOR
SBH21 = Male Box Header with Centered Polarizing Notch, .079" [2.00mm] Contact Centers					BK = Black Other Color Options Available (Consult Factory)
HOUSING MATERIAL					TERMINATION TYPE
N = Nylon 6T					ST = Straight RA = Right Angle SM = Surface Mount
CONTACT MATERIAL					NUMBER OF CONTACT POSITIONS (Pins per Row)
B = Brass					03 thru 20, 22, 25, 27, 28, 30, 31, 32, 34
CONTACT FINISH - RoHS Compliant					NUMBER OF ROWS
P = Gold Flash Overall					D = Dual Row
CONTACT CENTERS					
N = .079" [2.00mm]					

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com**STRAIGHT (ST)**

Example P/N: SBH21-NBPN-D20-ST-BK

**RIGHT ANGLE (RA)**

Example P/N: SBH21-NBPN-D20-RA-BK

**SURFACE MOUNT (SM)**

Example P/N: SBH21-NBPN-D20-SM-BK

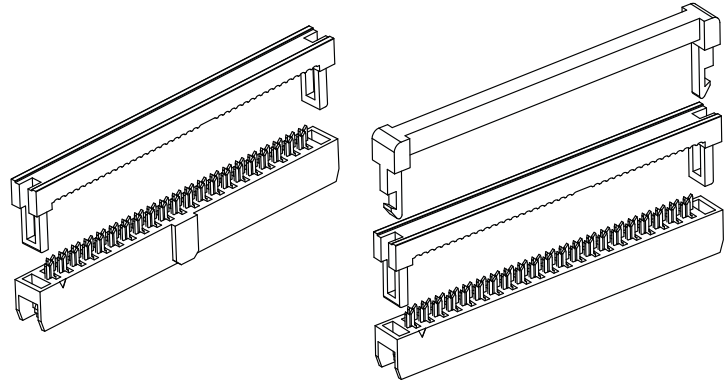




.079" [2.00] IDC Sockets, Insulation Displacement With or Without Strain Relief

SPECIFICATIONS

- **Centered Polarizing Key Optional**
- Operating Temperature: - 45° C to + 85° C
- UL Flammability Rating: 94V-0
- Current Rating: 1 AMP per contact
- Dielectric Withstanding: 500 VAC
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SBH21 series (See opposite page)**



PART NUMBER OPTIONS

SERIES

- SFH21 = Female Box Header Without Strain Relief,
.079" [2.00mm] Contact Centers
SFH213 = Female Box Header With Strain Relief,
.079" [2.00mm] Contact Centers

HOUSING MATERIAL

P = PBT

CONTACT MATERIAL

P = Phosphor Bronze

CONTACT FINISH - RoHS Compliant

P = Gold Flash Overall

E = .000100" Pure Tin, Matte, Overall

V = Gold Flash on Contact Surface, Nickel Underplate on Tails

SFH21 - P P P N - D 10 - ID - BK - M181

MODIFICATION (Omit for Standard)

M181 = Without Centered Polarizing Key

COLOR

BK = Black

GY = Grey

TERMINATION TYPE (Opposite Page)

ID = Insulation Displacement

NUMBER OF CONTACT POSITIONS

03 thru 13, 15, 17, 20, 22, 25, 30, 34

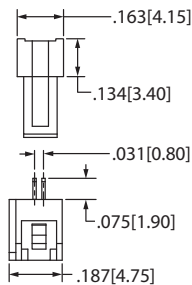
NUMBER OF ROWS

D = Dual Row

CONTACT CENTERS

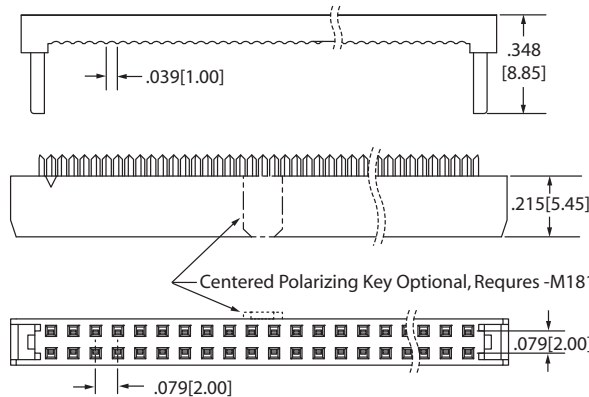
N = .079" [2.00mm]

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com

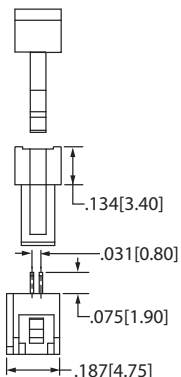
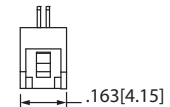


**INSULATION DISPLACEMENT (ID)
without Strain Relief,
requires SFH21**

Example P/N: SFH21-PPPN-D20-ID-BK

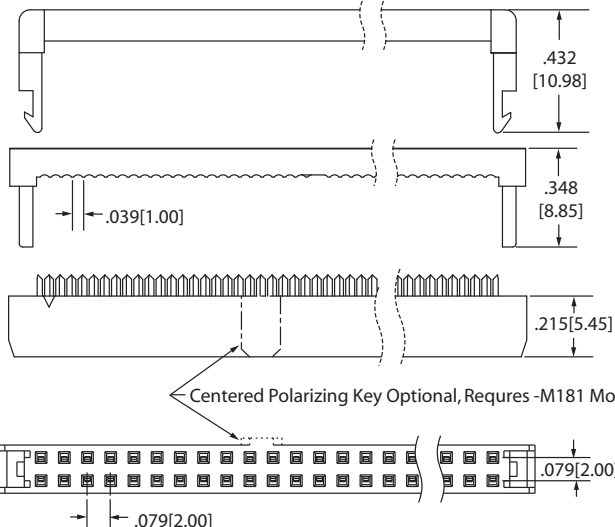


**-M181 Modification
(No Centered
Polarizing Key)**

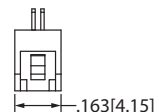


**INSULATION DISPLACEMENT (ID)
with Strain Relief,
requires SFH213**

Example P/N: SFH213-PPPN-D20-ID-BK



**-M181 Modification
(No Centered
Polarizing Key)**

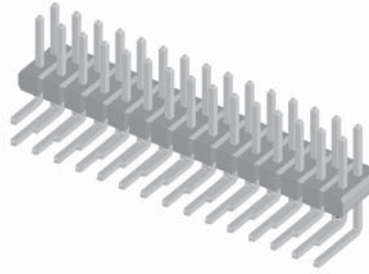




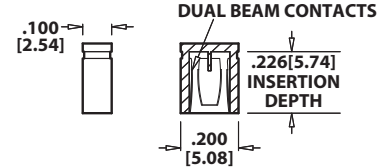
.100" [2.54 mm] Contact Centers, Male Breakaway Header Dip Solder/Right Angle/SMT

SPECIFICATIONS

- 3 amp current rating per contact
- UL Flammability Rating: 94V-O
- Insulator: Polyester, PA9T
- Contact Material: Copper Alloy



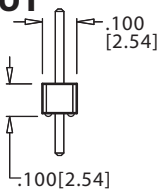
JUMPERS



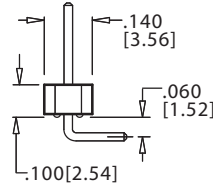
PART NUMBER:
STC02SYAN (TIN PLATE)
SPC02SYAN (GOLD FLASH)
SSC02SYAN (0.000010" GOLD PLATE)

READOUT

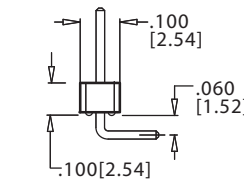
SINGLE ROW (S)



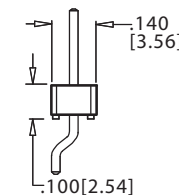
STRAIGHT



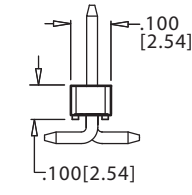
RIGHT ANGLE (Standard)



RIGHT ANGLE (Narrow)
-M71 Modification Code

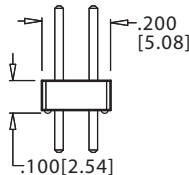


SMT, -M89
Modification Code

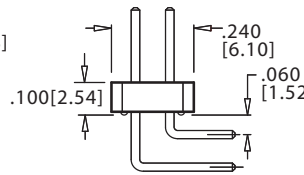


SMT, -M30
Modification Code

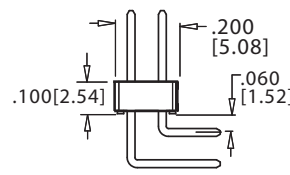
DUAL ROW (D)



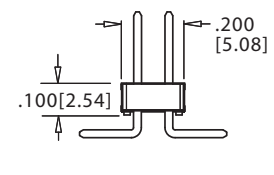
STRAIGHT



RIGHT ANGLE (Standard)



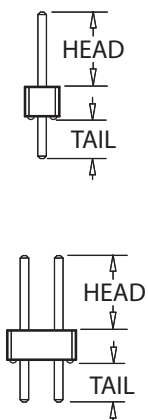
RIGHT ANGLE (Narrow)
-M71 Modification Code



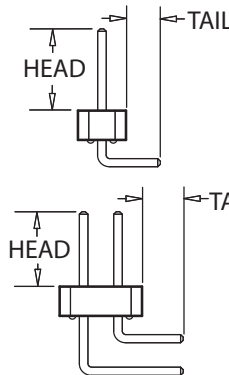
SMT, -M30
Modification Code

TERMINATION TYPE

STRAIGHT TERMINATIONS



P/N CODE	HEAD DIMENSION	TAIL DIMENSION
AA	.230 [5.84]	.120 [3.05]
AB	.230 [5.84]	.230 [5.84]
AC	.230 [5.84]	.320 [8.13]
AD	.230 [5.84]	.420 [10.67]
AE	.230 [5.84]	.520 [13.21]
AF	.230 [5.84]	.620 [15.75]
AG	.230 [5.84]	.720 [18.29]
AH	.230 [5.84]	.820 [20.83]
FA	.318 [8.08]	.120 [3.05]
FB	.318 [8.08]	.220 [5.59]
FC	.318 [8.08]	.320 [8.13]
FD	.318 [8.08]	.420 [10.67]
FE	.318 [8.08]	.520 [13.21]
ZA	.120 [3.05]	.120 [3.05]
ZC	.120 [3.05]	.260 [6.60]
ZD	.120 [3.05]	.610 [15.49]

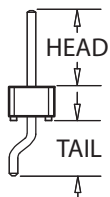


RIGHT ANGLE BEND TERMINATIONS

P/N CODE	HEAD DIMENSION	TAIL DIMENSION	-M71 TAIL DIMENSION
BA	.230 [5.84]	.100 [2.54]	.120 [3.05]
BB	.230 [5.84]	.200 [5.08]	.220 [5.59]
BC	.230 [5.84]	.300 [7.62]	.320 [8.13]
BD	.230 [5.84]	.400 [10.16]	.420 [10.67]
BE	.230 [5.84]	.500 [12.70]	.520 [13.21]
BF**	.230 [5.84]	.600 [15.24]	
BG**	.230 [5.84]	.700 [17.78]	
GA	.318 [8.08]	.100 [2.54]	.120 [3.05]
GB	.318 [8.08]	.200 [5.08]	.220 [5.59]
GC**	.318 [8.08]	.300 [7.62]	
GD**	.318 [8.08]	.400 [10.16]	

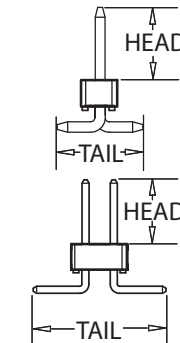
**Consult Factory for availability in Dual Readout.

SMT TERMINATIONS, Single Row with -M89 Modification Code, ('G' Material Only)



P/N CODE	HEAD DIMENSION	TAIL DIMENSION
BS	.230 [5.84]	.180 [4.57]
GS	.318 [8.08]	.180 [4.57]

SMT TERMINATIONS, Single or Dual Row with -M30 Modification Code, ('G' Material Only)



P/N CODE	HEAD DIMENSION	SINGLE ROW TAIL DIMENSION	DUAL ROW TAIL DIMENSION
AB	.230 [5.84]	.320 [8.13]	.420 [10.67]
FB	.318 [8.08]	.300 [7.62]	.400 [10.16]

.100" [2.54 mm] Contact Centers, Male Breakaway Header Dip Solder/Right Angle/SMT

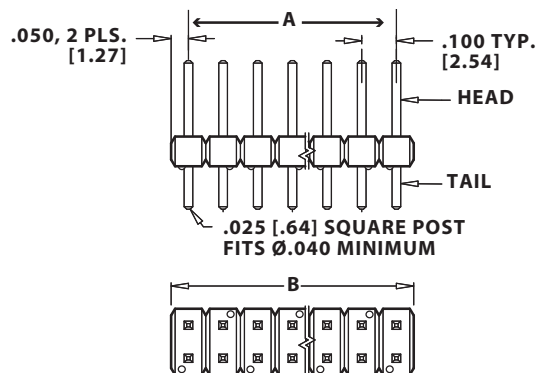
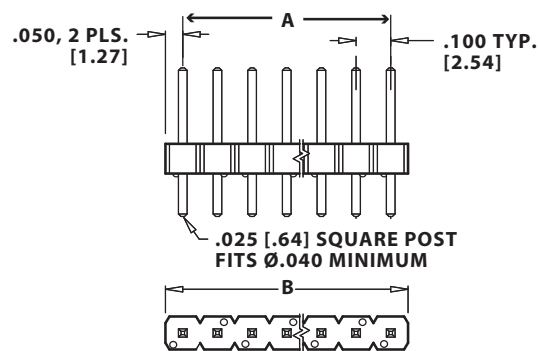


PART NUMBER CODING

SERIES		P	B	C	36	D	AA	N	- Mxxx
P = PBT/Phosphor Bronze									
Operating Temperature: -65°C to + 125°C									
Processing Temperature: 260° for 10 sec. Max.									
G = PA9T/Phosphor Bronze									
Operating Temperature: -65°C to + 150°C									
Processing Temperature: 260° for 120 sec. Max.									
CONTACT FINISH - RoHS Compliant									
All platings are Lead Free and have .000050" Nickel underplate									
Contact Surface		Termination							
B = .000010" Gold		.000100" Pure Tin, Matte							
C = .000030" Gold		.000100" Pure Tin, Matte							
Contact Surface		Overall Plating							
E = .000010" Pure Tin, Matte		.000100" Pure Tin, Matte							
CONTACT CENTERS									
C = .100" [2.54mm]									
NUMBER OF POSITIONS									
01 Thru 36 (eg. 32 Dual = 64 Contacts)									
		MODIFICATION CODE (Consult Factory)							
		OMIT FOR STANDARD							
		-M30 = SMT ('G' Material Only)							
		-M89 = SMT ('G' Material Only)							
		-M71 = Narrow Body (Right Angle Only)							
		MOUNTING STYLE							
		N =No Mounting							
		R =Retent Lead (Consult Factory)							
		TERMINATION TYPE (Opposite Page)							
		Straight = AA, AB, AC, AD, AE, AF, AG, AH, FA, FB, FC, FD, FE, ZA, ZC, ZD							
		Right Angle = BA, BB, BC, BD, BE, BF, BG, GA, GB, GC, GD, GS							
		Right Angle with -M71 Modification Code = BA, BB, BC, BD, BE, GA, GB							
		SMT with -M89 Modification Code = BS, GS ('G' Material Only)							
		SMT with -M30 Modification Code = AB, FB ('G' Material Only)							
		READOUT (Opposite Page)							
		S = Single							
		D = Dual							

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



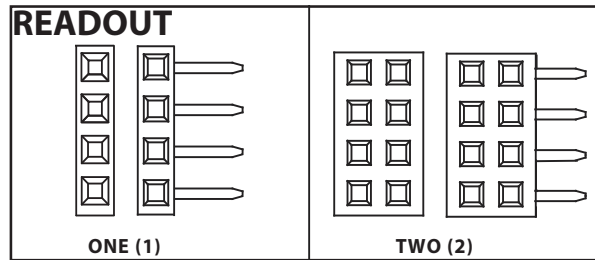
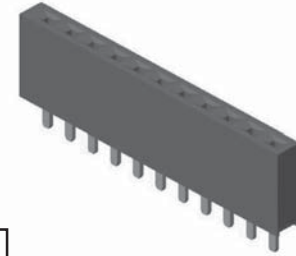
PART NUMBER	NUMBER OF CONTACTS SINGLE/DUAL	A		B	
		Inches	[MM]	Inches	[MM]
P_C01__N	01/02	N/A	N/A	0.100	2.54
P_C02__N	02/04	0.100	2.54	0.200	5.08
P_C03__N	03/06	0.200	5.08	0.300	7.62
P_C04__N	04/08	0.300	7.62	0.400	10.16
P_C05__N	05/10	0.400	10.16	0.500	12.70
P_C06__N	06/12	0.500	12.70	0.600	15.24
P_C07__N	07/14	0.600	15.24	0.700	17.78
P_C08__N	08/16	0.700	17.78	0.800	20.32
P_C09__N	09/18	0.800	20.32	0.900	22.86
P_C10__N	10/20	0.900	22.86	1.000	25.40
P_C11__N	11/22	1.000	25.40	1.100	27.94
P_C12__N	12/24	1.100	27.94	1.200	30.48
P_C13__N	13/26	1.200	30.48	1.300	33.02
P_C14__N	14/28	1.300	33.02	1.400	35.56
P_C15__N	15/30	1.400	35.56	1.500	38.10
P_C16__N	16/32	1.500	38.10	1.600	40.64
P_C17__N	17/34	1.600	40.64	1.700	43.18
P_C18__N	18/36	1.700	43.18	1.800	45.72
P_C19__N	19/38	1.800	45.72	1.900	48.26
P_C20__N	20/40	1.900	48.26	2.000	50.80
P_C21__N	21/42	2.000	50.80	2.100	53.34
P_C22__N	22/44	2.100	53.34	2.200	55.88
P_C23__N	23/46	2.200	55.88	2.300	58.42
P_C24__N	24/48	2.300	58.42	2.400	60.96
P_C25__N	25/50	2.400	60.96	2.500	63.50
P_C26__N	26/52	2.500	63.50	2.600	66.04
P_C27__N	27/54	2.600	66.04	2.700	68.58
P_C28__N	28/56	2.700	68.58	2.800	71.12
P_C29__N	29/58	2.800	71.12	2.900	73.66
P_C30__N	30/60	2.900	73.66	3.000	76.20
P_C31__N	31/62	3.000	76.20	3.100	78.74
P_C32__N	32/64	3.100	78.74	3.200	81.28
P_C33__N	33/66	3.200	81.28	3.300	83.82
P_C34__N	34/68	3.300	83.82	3.400	86.36
P_C35__N	35/70	3.400	86.36	3.500	88.90
P_C36__N	36/72	3.500	88.90	3.600	91.44



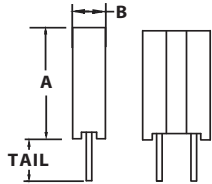
.100" [2.54 mm] Contact Centers, Female Header Dip Solder/Right Angle/SMT

SPECIFICATIONS

- 3 amp current rating per contact
- UL Flammability Rating : 94V-O
- Insulator : Nylon 6-T/Polyester
- Contact Material : Phosphor Bronze

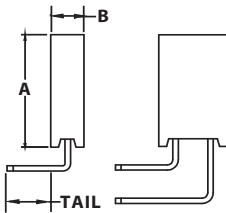


TERMINATION TYPE



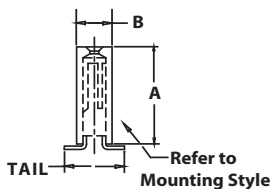
STRAIGHT

P/N CODE	ROWS	TERM	A	B	TAIL
LFB	1	STRAIGHT	.334 [8.50]	.094 [2.50]	.125 [3.20]
	2	STRAIGHT	.334 [8.50]	.197 [5.00]	.125 [3.20]



RIGHT ANGLE

P/N CODE	ROWS	TERM	A	B	TAIL
LGB	1	RIGHT ANGLE	.334 [8.50]	0.094 [2.40]	.125 [3.15]
LJB	2	RIGHT ANGLE	.334 [8.50]	0.197 [5.00]	.125 [3.15]



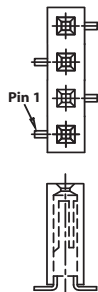
SMT

P/N CODE	ROWS	TERM	ENTRY	A	B	TAIL
KFX	1	SMT	TOP ENTRY	.279 [7.10]	.098 [2.50]	.169 [4.30]
KFM	2	SMT	TOP ENTRY	.279 [7.10]	.197 [5.00]	.265 [6.80]

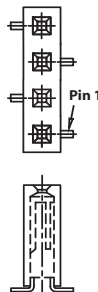
MOUNTING STYLE



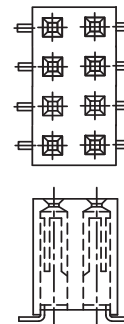
**No Mounting
Standard (N)**



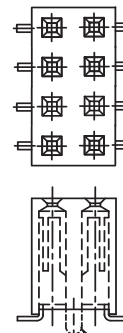
**One Row SMT,
Pin 1 Left (C)**



**One Row SMT,
Pin 1 Right (D)**



**Two Row SMT,
Without Guide Post (S)**

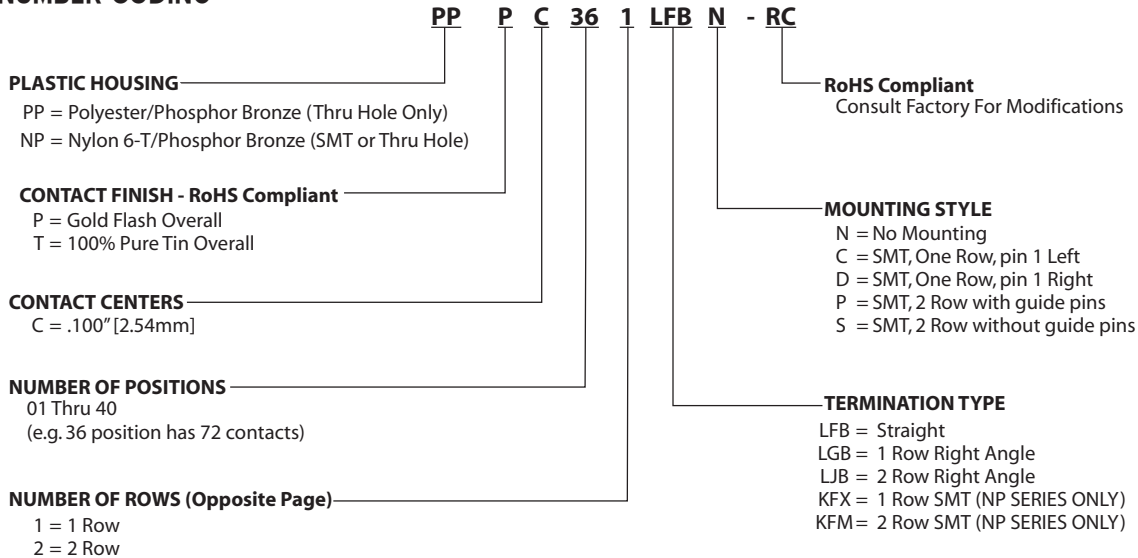


**Two Row SMT,
With Guide Post (P)**

**.100" [2.54 mm] Contact Centers, Female Header
Dip Solder/Right Angle/SMT**

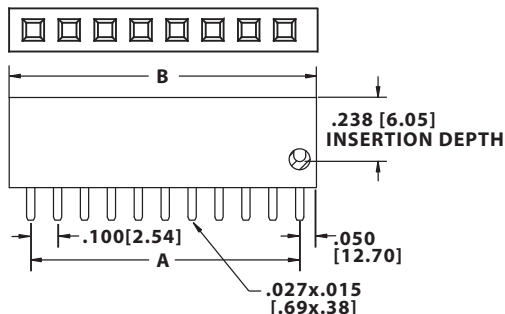


PART NUMBER CODING

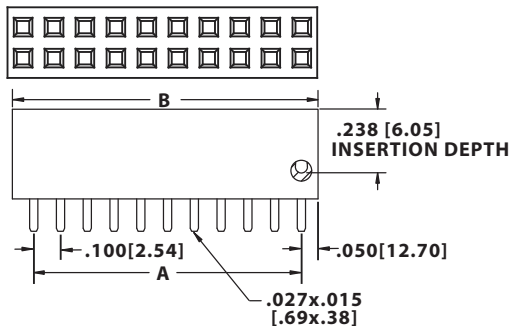


DIMENSIONS

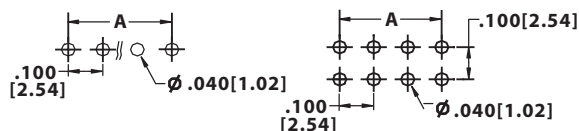
Dimensions in [] are in millimeters, all others are in inches.



**SINGLE READOUT,
STRAIGHT TAIL SHOWN**



**DUAL READOUT,
STRAIGHT TAIL SHOWN**

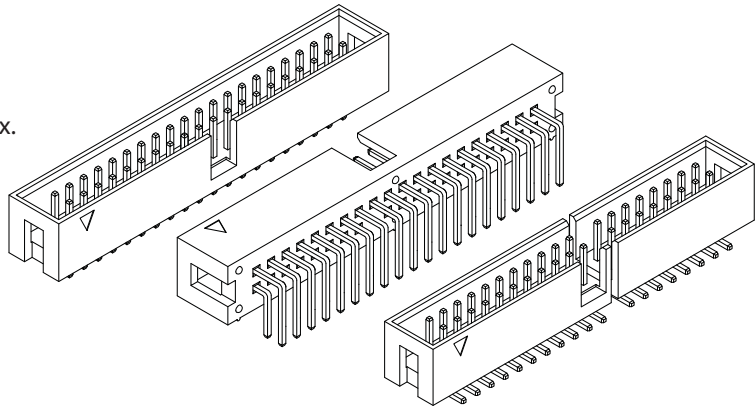


**Recommended P.C.Board
Hole Layout**

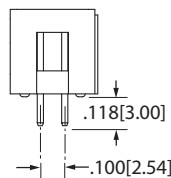
Number of Positions	Number of Contacts		Dimension A		Dimension B	
	1 Row	2 Row	Inches	[mm]	Inches	[mm]
01	1	2				
02	2	4	.100	2.54	.220	5.58
03	3	6	.200	5.08	.320	8.12
04	4	8	.300	7.62	.420	10.66
05	5	10	.400	10.16	.520	13.20
06	6	12	.500	12.70	.620	15.74
07	7	14	.600	15.24	.720	18.28
08	8	16	.700	17.78	.820	20.82
09	9	18	.800	20.32	.920	23.36
10	10	20	.900	22.86	1.020	25.90
11	11	22	1.000	25.40	1.120	28.44
12	12	24	1.100	27.94	1.220	30.98
13	13	26	1.200	30.48	1.320	33.52
14	14	28	1.300	33.02	1.420	36.06
15	15	30	1.400	35.56	1.520	38.60
16	16	32	1.500	38.10	1.620	41.14
17	17	34	1.600	40.64	1.720	43.68
18	18	36	1.700	43.18	1.820	46.22
19	19	38	1.800	45.72	1.920	48.76
20	20	40	1.900	48.26	2.020	51.30
21	21	42	2.000	50.80	2.120	53.84
22	22	44	2.100	53.34	2.220	56.38
23	23	46	2.200	55.88	2.320	58.92
24	24	48	2.300	58.42	2.420	61.46
25	25	50	2.400	60.96	2.520	64.00
26	26	52	2.500	63.50	2.620	66.54
27	27	54	2.600	66.04	2.720	69.08
28	28	56	2.700	68.58	2.820	71.62
29	29	58	2.800	71.12	2.920	74.16
30	30	60	2.900	73.66	3.020	76.70
31	31	62	3.000	76.20	3.120	79.24
32	32	64	3.100	78.74	3.220	81.78
33	33	66	3.200	81.28	3.320	84.32
34	34	68	3.300	83.82	3.420	86.86
35	35	70	3.400	86.36	3.520	89.40
36	36	72	3.500	88.90	3.620	91.94
37	37	74	3.600	91.44	3.720	94.48
38	38	76	3.700	93.98	3.820	97.02
39	39	78	3.800	96.52	3.920	99.56
40	40	80	3.900	99.06	4.020	102.10

**.100" [2.54] Male Shrouded Box Headers, Straight, Right Angle, SMT****SPECIFICATIONS**

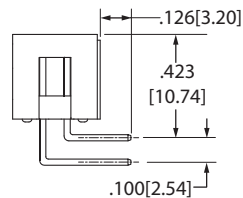
- **Centered Polarizing Notch**
- Operating Temperature: - 40° C to + 85° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMs Max.
- Current Rating: 3 AMP per contact
- Voltage Drop: AC 500 V.
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SFH11 series (See opposite page)**

**PART NUMBER OPTIONS**

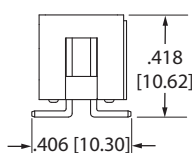
SERIES	SBH11 - P B P C - D 10 - ST - BK	COLOR
SBH11 = Male Box Header with Centered Polarizing Notch, .100" [2.54mm] Contact Centers		BK = Black Other Color Options Available (Consult Factory)
HOUSING MATERIAL		TERMINATION TYPE
P = PBT N = Nylon 6T		ST = Straight RA = Right Angle SM = Surface Mount, 'N' Material Only
CONTACT MATERIAL		NUMBER OF CONTACT POSITIONS (Pins per Row)
B = Brass		03 thru 08, 10, 12, 13, 15, 17, 20, 22, 25, 30, 32
CONTACT FINISH - RoHS Compliant		NUMBER OF ROWS
P = Gold Flash Overall		D = Dual Row
CONTACT CENTERS		
C = .100" [2.54mm]		

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com**STRAIGHT (ST)**

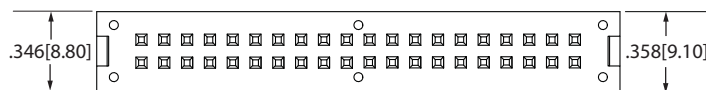
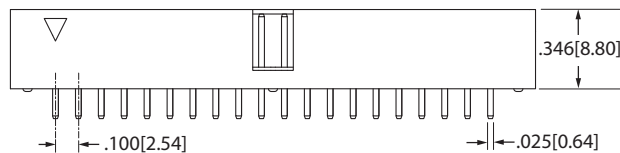
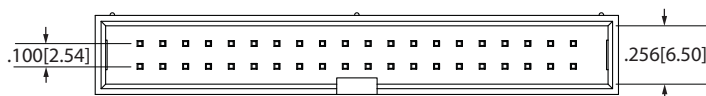
Example P/N: SBH11-PBPC-D20-ST-BK

**RIGHT ANGLE (RA)**

Example P/N: SBH11-PBPC-D20-RA-BK

**SURFACE MOUNT (SM)**

Example P/N: SBH11-NBPC-D20-SM-BK

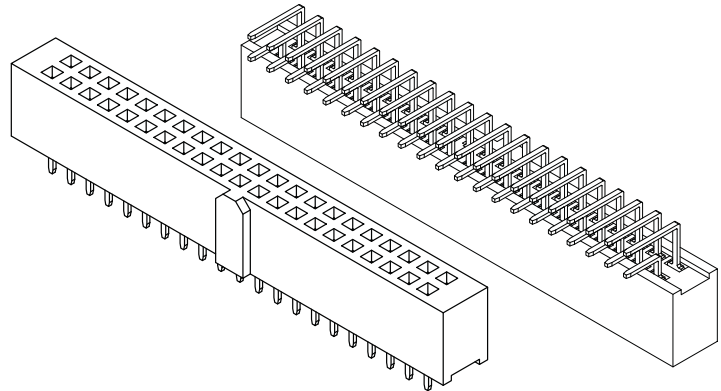




.100" [2.54] Female Headers, Straight and Right Angle

SPECIFICATIONS

- **Centered Polarizing Key Optional**
- Operating Temperature: - 40° C to + 105° C
- Processing Temperature: 230° C for 60 seconds Max.
(260° C, 10 seconds)
- UL Flammability Rating: 94V-0
- Voltage Rating: 20m OHMS Max.
- Current Rating: 3 AMP per contact
- Dielectric Withstanding: 500 VAC
- Insulation Resistance: 1000 Mega OHMS
- **Mates with SBH11 series (See opposite page)**



PART NUMBER OPTIONS

SFH11 - P P P C - D 10 - ST - BK - M181

SERIES

SFH11 = Female Box Header with Centered Polarizing Key, .100" [2.54mm] Contact Centers

HOUSING MATERIAL

P = PBT

CONTACT MATERIAL

P = Phosphor Bronze
B = Brass

CONTACT FINISH - RoHS Compliant

P = Gold Flash Overall
E = .000100" Pure Tin, Matte, Overall

CONTACT CENTERS

C = .100" [2.54mm]

MODIFICATION (Omit for Standard)

M181 = Without Centered Polarizing Key

COLOR

BK = Black
GY = Grey

TERMINATION TYPE (Opposite Page)

ST = Straight
RA = Right Angle

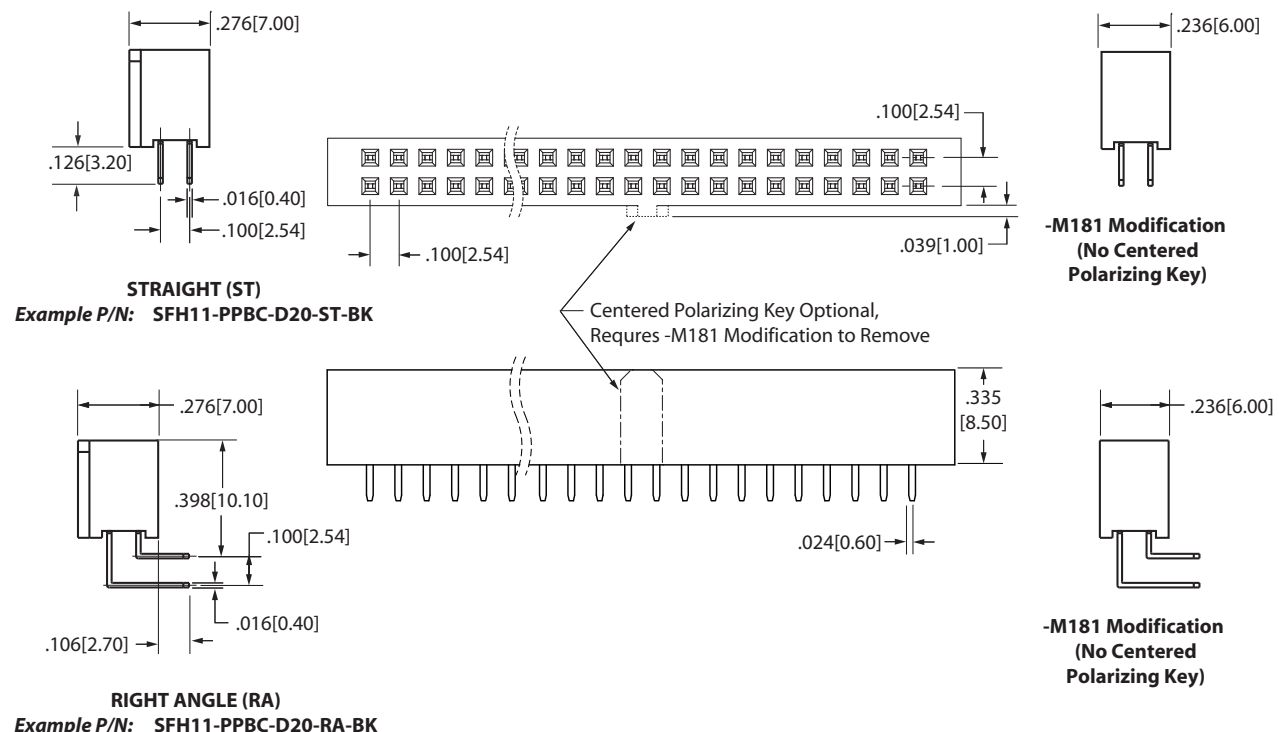
NUMBER OF CONTACT POSITIONS

03 thru 08, 10, 12, 13, 15, 17, 20, 25, 30, 32

NUMBER OF ROWS

D = Dual Row

DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com

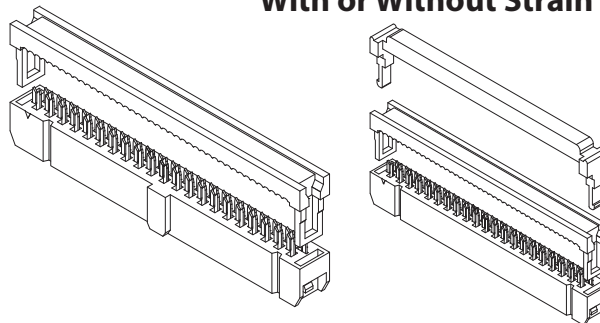
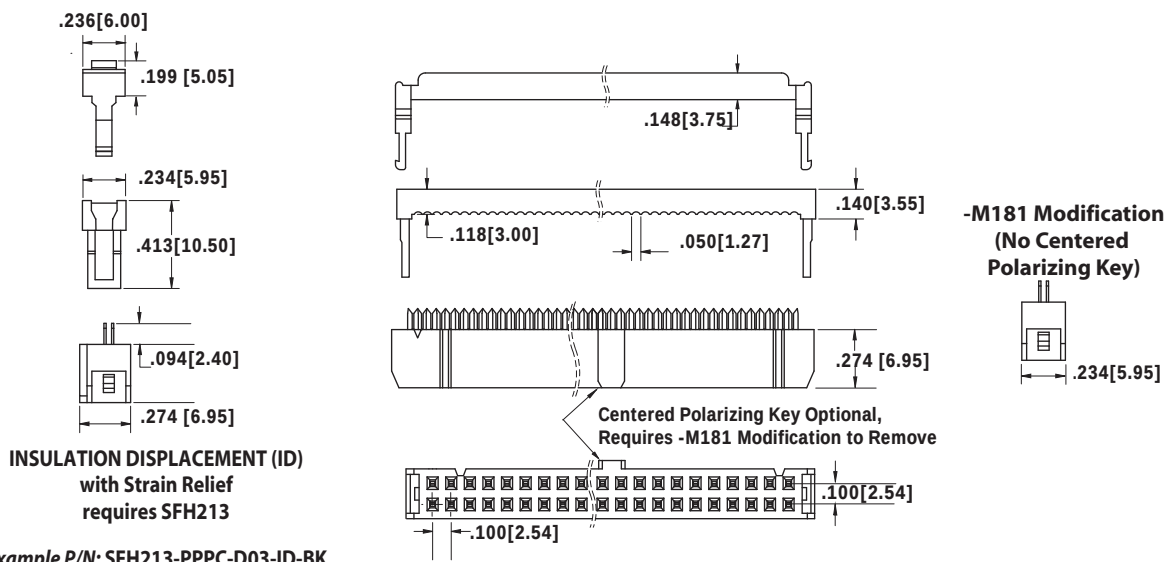
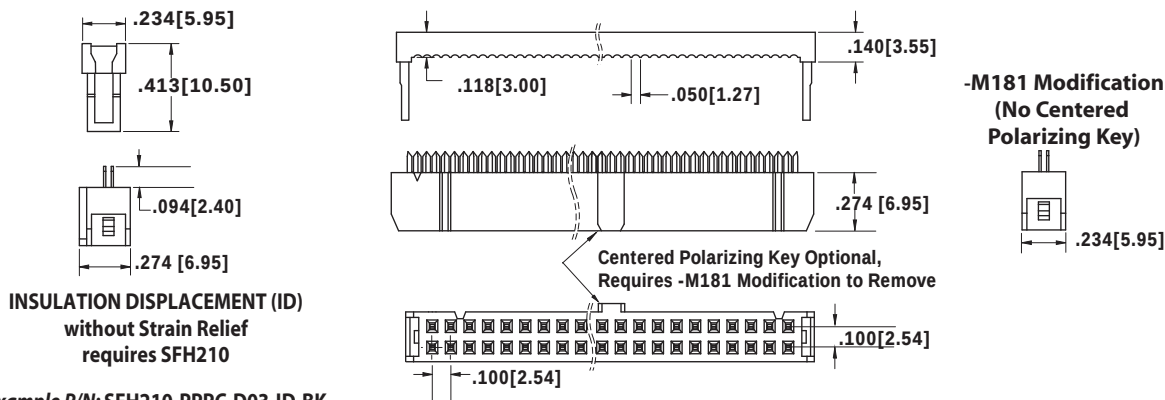


**SPECIFICATIONS**

- **Centered Polarizing Key Optional**
- Operating Temperature: - 40° C to + 105° C
- UL Flammability Rating: 94V-0
- Current Rating: 1 AMP per contact
- Dielectric Withstanding: 500 VAC
- Insulation Resistance: 3,000 Mega OHMS
- For 1.27 mm Pitch AWG 28 Flat Ribbon Cable
- **Mates with SBH11 series**

PART NUMBER OPTIONS

SFH210 - P P P C - D 10 - ID - BK - Mxxx	
SERIES	MODIFICATION (Omit for Standard)
SFH210 = IDC Socket, Without Strain Relief, .100" [2.54mm] Contact Centers	M181 = Without Centered Polarizing Key
SFH213 = IDC Socket, With Strain Relief, .100" [2.54mm] Contact Centers	M207 = With Polarizing Key, With Mylar in Tape & Reel (only for SFH210)
HOUSING MATERIAL	M208 = Without Polarizing Key, With Mylar in Tape and Reel (only for SFH210)
P = PBT	COLOR
CONTACT MATERIAL	BK = Black
P = Phosphor Bronze	TERMINATION TYPE
CONTACT FINISH - RoHS Compliant	ID = Insulation Displacement
P = Gold Flash Overall	NUMBER OF CONTACT POSITIONS
E = .000100" Pure Tin, Matte, Overall	03 thru 13, 15, 17, 20, 25, 30, 32
V = Gold Flash on Contact Surface, Nickel Underplate on Tails	*M208 and M207 not available in 30 and 32
J = .000015" Gold on Contact Surface, Gold Flash on Tails	NUMBER OF ROWS
K = .000015" Gold on Contact Surface, Nickel Underplate on Tails	D = Dual Row
	CONTACT CENTERS
	C = .100" [2.54mm]

**DIMENSIONS** For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com



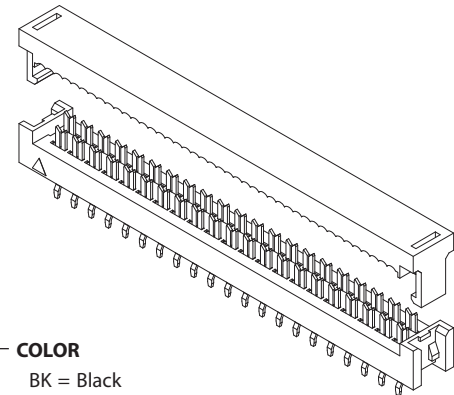
.100" [2.54 mm] IDC Dip Plug, Straight

SPECIFICATIONS

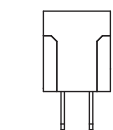
- Operating Temperature: - 40° C to + 105° C
- Current Rating: 1 AMP per contact
- Dielectric Withstanding: 1,000 VAC
- Insulation Resistance: 5,000 Mega OHMS
- For 1.27 mm Pitch AWG 28 Flat Ribbon Cable

PART NUMBER OPTIONS

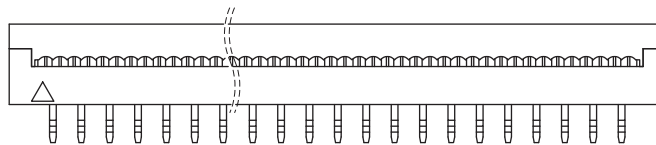
SERIES	SIP110 - P P P C - D 10 - ST - BK	COLOR
SIP110 = IDC Dip Plug .100" [2.54mm] Contact Centers		BK = Black
HOUSING MATERIAL		TERMINATION TYPE
P = PBT		ST = Straight SK = Straight with Kink
CONTACT MATERIAL		NUMBER OF CONTACT POSITIONS
P = Phosphor Bronze		03 thru 10, 12, 13, 14, 15, 17, 20, 25, 30, 32
CONTACT FINISH - RoHS Compliant		NUMBER OF ROWS
P = Gold Flash Overall E = .000100" Pure Tin, Matte, Overall V = Gold Flash on Contact Surface, Nickel Underplate on Tails J = .000015" Gold on Contact Surface, Gold Flash on Tails K = .000015" Gold on Contact Surface, Nickel Underplate on Tails		D = Dual Row
		CONTACT CENTERS
		C = .100" [2.54mm]



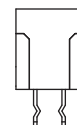
DIMENSIONS For complete drawings, go to www.sullinscorp.com or e-mail techsupport@sullinscorp.com



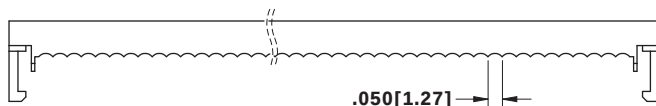
STRAIGHT (ST)



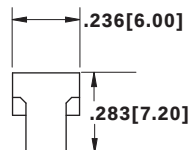
ASSEMBLED FRONT VIEW



STRAIGHT WITH KINK (SK)

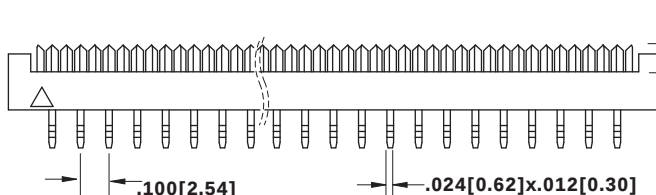


.050[1.27]



.236[6.00]

.283[7.20]

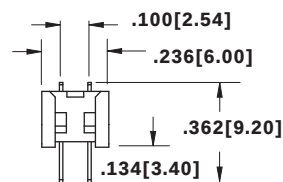


.091[2.30] (SK)

.094[2.40] (ST)

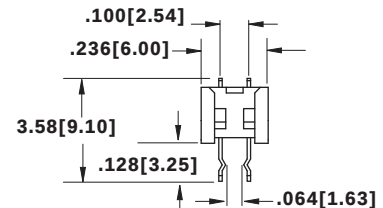
.100[2.54]

.024[0.62] x .012[0.30]



STRAIGHT (ST)

Example P/N: SIP110-PP_C-D10-ST-BK



STRAIGHT WITH KINK (SK)

Example P/N: SIP110-PP_C-D15-SK-BK



GENERAL SPECIFICATIONS

RoHS COMPLIANT

RoHS
COMPLIANT

All parts are currently manufactured with recommended materials to meet RoHS standards. All contacts have 50u" of nickel underplating, and a large selection of plating options: Pure tin matte, overall gold, or selective gold plating. For complete part number information or operating/processing temperature parameters, visit the RoHS section of our website, or refer to page 99 of this catalog.

MATERIALS

To determine Assembly Operating Temperature, take the lower of two temperatures

Insulator:			Operating Temperature	Processing Temperature
Standard	PBT, Valox*	Glass filled Thermoplastic Polyester	-65°C to +130°C	260°C / 10 Seconds
Special	PPS, Ryton*	Glass/Mineral filled Polyphenylene Sulfide, Green	-65°C to +220°C	260°C / 120 Seconds
Special	PPS, Ryton*	Glass filled Polyphenylene Sulfide, Brown	-65°C to +200°C	260°C / 120 Seconds
Special	PA9T	High Temperature Polyamide	-65°C to +150°C	260°C / 120 Seconds
Special	Peek	Glass filled Polyetheretherketone	-65°C to +250°C	

Contacts:

Standard	Phosphor Bronze (Available in All Contact Styles)	-65°C to +125°C
Special	Beryllium Copper (Consult Factory)	-65°C to +150°C
Special	Spinodal** (Consult Factory)	-65°C to +200°C
Special	Beryllium Nickel (Consult Factory)	-65°C to +300°C

Plating:

Gold and/or Tin over .000050" Nickel Underplate, Lead Free

UL/CUL File Number: E64287 Section 2

Cage Code: 31223

* Or equivalent.

** Consult factory for special soldering guidelines.

MECHANICAL

Board Insertion Force 16 oz Maximum per contact pair using .062"[1.58mm] thick steel test blade

Board Withdrawal Force 1 oz Minimum per contact pair using .062"[1.58mm] thick steel test blade

Special Insertion/Withdrawal forces available upon request

ELECTRICAL PERFORMANCE (Per Mil-C-21097C)

Insulation Resistance: 5,000 Mega Ohm

Dielectric Withstanding Voltage

Contact Centers:	.100"[2.54mm]	.125"[3.18mm]	.150"[3.81mm]	.156"[3.96mm]
Voltage:	600 VDC	800 VDC	1500 VDC	1800 VDC
	750 VAC	750 VAC	900 VAC	950 VAC

Current Rating: 3 to 5 amperes (amps) per contact

Voltage Drop: 30 Milli volt at rated current

Contact Resistance: 30 Milli ohm maximum at rated current

Registered Trademarks

Sabic Innovative Plastics: Valox

Gardner-Denver Co.: Wire Wrap

Phillips 66: Ryton

Ametek: Spinodal

RTP Compounder: PEEK

Underwriters Labs: UL

Sullins Electronics: Sullins

Sullins Electronics: Zero Lead Time



MP - 0 100 - 22 - D W - 5 xxx

PLATING - RoHS Compliant

ALL PLATINGS ARE LEAD FREE AND HAVE
.000050" NICKEL UNDERPLATE

	Contact Surface	Termination
*MPSL =	.000010" Gold	.000100" Pure Tin Matte
*EMPSL =	.000010" Gold	.000100" Pure Tin Matte
*MPL =	.000100" Overall Pure Tin, Matte	
*EMPL =	.000100" Overall Pure Tin, Matte	
MP =	.000010" Overall Gold	
EMP =	.000010" Overall Gold	
MPP =	Spinodal Contact Material (Overall Gold Only)	
EMPP =	Spinodal Contact Material (Overall Gold Only)	

* Requires 'K' Modification Code

Platings that start with 'E' are for Economy Eyelet Only
Other Plating and thicknesses available upon request.

INSULATOR MATERIAL

All Materials are U.L. Approved 94V-0

- 0 = PBT, Blue
- 1 = PPS, Brown
- 2 = PBT, Green
- 3 = PBT, Black
- 4 = PA9T, Black
- 5 = PPS, Black
- 6 = PPS, Green
- 7 = PPS, Brown
- 8 = Peek, Natural

CONTACT CENTERS

- 100 = .100" [2.54mm]
- 125 = .125" [3.18mm]
- 150 = .150" [3.84mm]
- 156 = .156" [3.96mm]

NUMBER OF POSITIONS

02 - 70 Contacts Per Row

READOUT

D = Dual Row

TERMINATION TYPE

- FS = .045" Square Tails - .720" Insulator Height
- P = Solder Eyelet - .431" Insulator Height
- PE = Economy Eyelet - .431" Insulator Height,
Card Extender, .156" only
- R = .026" Round Tails - .610" Insulator Height,
- S = Dip Solder - .431" Insulator Height
- SE = Card Extender - .431" Insulator Height
- W = .025" Square Wire Wrap -
.610" Insulator Height
- WE = .025" Square Card Extender -
.610" Insulator Height

MOUNTING STYLE

- 1 = **.125" Clearance Holes**
.245" Ears, .431" Insulator Height
.250" Flush Ears, .610" Insulator Height
- 2 = **#4-40 Threaded Insert**
.245" Ears, .431" Insulator Height
.250" Flush Ears, .610" Insulator Height
- 3 = **Floating Bobbin**
.220" Ears not Including Bobbin
on All Connectors
(Flush Ears on .610 Insulator Height)
- 4 = **No Mounting Ears**
All Connectors
- 5 = **Raised with .125" Clearance Holes**
Wire Wrap Only, .610" Insulator Height
- 6 = **Raised with #4-40 Threaded Insert**
Wire Wrap Only, .610" Insulator Height
- 8 = **.125" Side Holes** (Cross Drilled)
- 9 = **One Ear, .125" Clearance Hole**
Dip Solder & Eyelet
- 10 = **One Ear, #4-40 Threaded Insert**
Dip Solder & Eyelet
- 11 = **.142" Mounting Holes**
.431" Insulator Height, Dip Solder, Eyelet
.610" Insulator Height, Wire Wrap
- 12 = **.128" Clearance Holes**
.431" Insulator Height, Dip Solder & Eyelet
.610" Insulator Height, Wire Wrap
- 13 = **Flush Ears, .128" Clearance Holes**
.430" Ears with Pad on .610" Insulator
Height, Wire Wrap Only
- 14 = **.142" Side Holes** (Cross Drilled)
.431" Insulator Height, Dip Solder, Eyelet
.610" Insulator Height, Wire Wrap
- 15 = **Flush Ears, .125" Clearance Holes**
.190" Ears, No Pad
.610" Insulator Height, Wire Wrap Only
- 16 = **Flush .250" Ears to top of the
Card Entry Side of the Connector,**
.610" Insulator Height, Wire Wrap Only
- 18 = **Flush Ears, .125" Side Holes**
(Cross Drilled)
- 19 = **.152" Clearance Holes**
.610" Insulator Height, Wire Wrap Only
- 58 = **Raised Ears, .125" Side Holes**
(Cross Drilled)
- 81 = **Flush Ears, .125" Side Holes**
.250" Ears with Pad, .610" Insulator Height,
Wire Wrap
- 86 = **Side Holes with #4-40 Threaded Insert**
.250" Ears with Pad, .610" Insulator Height

MODIFICATION CODE

CONSULT FACTORY FOR OTHER OPTIONS

- A = **Contacts Loaded one side only**
- B = **Center Barrier for 28/56 -**
.156" Dip Solder & Eyelet
- C = **.030" Longer Cardslot and
Mounting Hole Centers for 22/44,**
All .156" (Consult Factory)
- D = **.000050" Gold Plating -**
(Consult Factory)
- E9 = **.200" Row Spacing on .156"**
Contact Centers
- F = **6.802" Cardslot for 43/86**
.156" Eyelet & Wire Wrap Only
- F9 = **6.802" Cardslot and .200" Row
Spacing for 43/86 Dip Solder Only**
- G = **.000030" Gold Plating on Contact
Surface; .000010" Gold Overall**
- H = **.190" Contact Length for .025"**
Square & .026" Round Contacts
.250" Contact Length without
Standoffs
- J = **Low Insertion Force**
- K = **MPSL - Selective Gold with Pure
Tin, Matte Plating on Tails**
MPL - Overall Pure Tin, Matte
- L = **.140" Contact Length for**
.156" Dip Solder Only
- M = **Pad on Bottom of Mounting Ears**
for .156", .431" Insulator Height,
Dip Solder & Eyelet Only
- N = **Hi-light Contact ID on Bottom**
(Consult Factory)
- P = **Engraving Reversed**
(Consult Factory)
- Q = **Right Angle Connector Contacts
Untrimmed**
(Requires 'R' Modification Code)
- R = **Right Angle Connectors**
- S = **Shorter Overall Length**
- T = **Center Standoffs Removed**
.100" & .125" Wire Wrap Only
- TT = **No Standoffs**
- U = **.000020" Gold Plating**
- X9 = **.200" Row Spacing for**
.100" & .156" Dip Solder Only
.250" Row Spacing for
.125" Dip Solder Only
- Y = **Beryllium Copper Contacts**
- Z = **Standoffs on .156" Wire Wrap**

See applicable specification pages for more information.

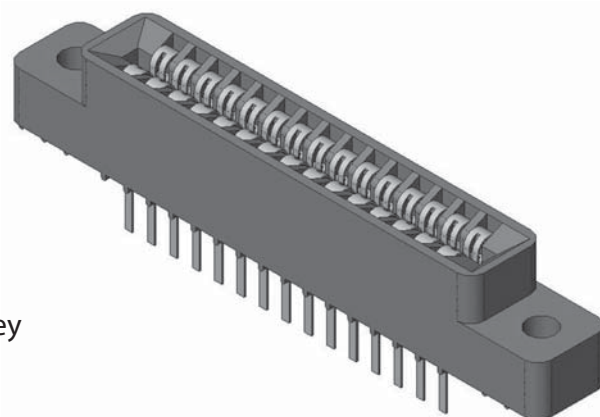
Specifications are subject to change without notice.



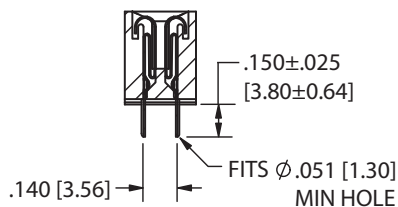
**.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Dip Solder**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- Row Spacing Available in .140" or .200"
(Use Modification Code 'X9' for .200")
- P/N 04-0003-000 for In Between Contact Position Key
See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

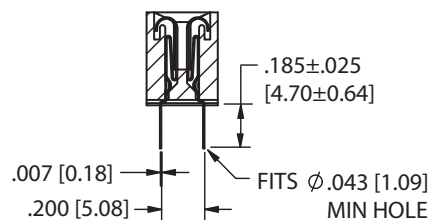


TERMINATION TYPE



**DIP SOLDER (S)
.140" ROW SPACING**

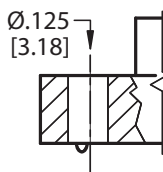
Example P/N: MP~~S~~L-0100-10-DS-1K



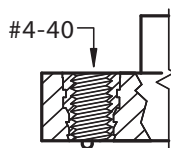
**DIP SOLDER (S)
.200" ROW SPACING
USE 'X9' MODIFICATION CODE**

Example P/N: MP~~S~~L-0100-10-DS-1X9K

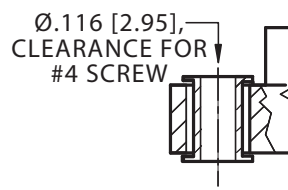
MOUNTING STYLE



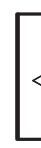
(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)



PART NUMBER CODING

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface

Termination

*MPSL = .000010" Gold

.000100" Pure Tin, Matte

*MPL = .000100" Overall Pure Tin, Matte

MP = .000010" Overall Gold

*Requires 'K' Modification Code

INSULATOR MATERIAL**

0 = PBT

CONTACT CENTERS

100 = .100" [2.54mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

MPSL - 0 100 - 10 - D S - 1 K

MODIFICATION CODE**

K = Required on MPSL or MPL Plating

Omit for MP Plating (Overall Gold)

X9 = .200" Row Spacing

MOUNTING STYLE (See Opposite Page)

1 = .125" Clearance Hole

2 = #4-40 Threaded Insert

3 = Floating Bobbin

4 = No Mounting

TERMINATION TYPE (See Opposite Page)

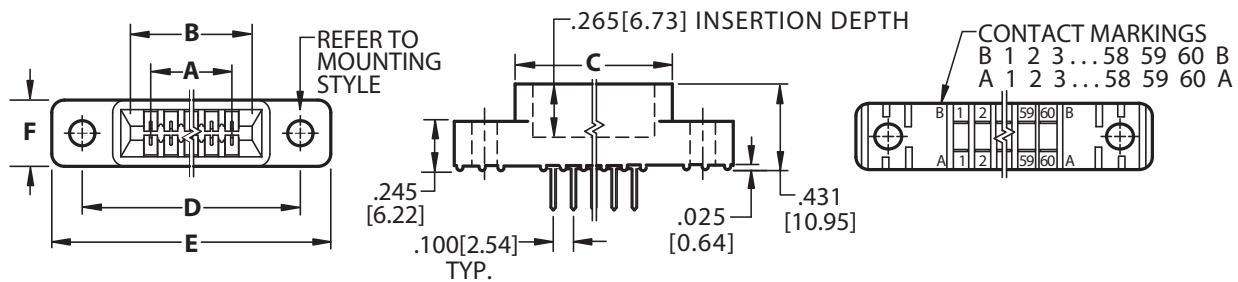
S = Dip Solder

READOUT

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



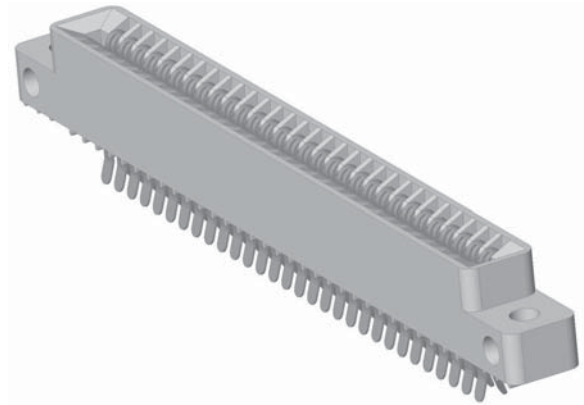
POSITIONS/ CONTACTS	INCHES					F±.005	[MILLIMETERS]					F±0.13
	A±.008	B±.008	C±.015	D±.010	E±.020		A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	
05/10	0.400	0.600	0.775	1.075	1.375	0.330	10.16	15.24	19.69	27.31	34.93	8.38
06/12	0.500	0.700	0.875	1.175	1.475		12.70	17.78	22.23	29.85	37.47	
07/14	0.600	0.800	0.975	1.275	1.575		15.24	20.32	24.77	32.39	40.01	
08/16	0.700	0.900	1.075	1.375	1.675		17.78	22.86	27.31	34.93	42.55	
10/20	0.900	1.100	1.275	1.575	1.875		22.86	27.94	32.39	40.01	47.63	
12/24	1.100	1.300	1.475	1.775	2.075		27.94	33.02	37.47	45.09	52.71	
13/26	1.200	1.400	1.575	1.875	2.175		30.48	35.56	40.01	47.63	55.25	
15/30	1.400	1.600	1.775	2.075	2.375		35.56	40.64	45.09	52.71	60.33	
17/34	1.600	1.800	1.975	2.275	2.575		40.64	45.72	50.17	57.79	65.41	
18/36	1.700	1.900	2.075	2.375	2.675		43.18	48.26	52.71	60.33	67.95	
19/38	1.800	2.000	2.175	2.475	2.775		45.72	50.80	55.25	62.87	70.49	
20/40	1.900	2.100	2.275	2.575	2.875		48.26	53.34	57.79	65.41	73.03	
22/44	2.100	2.300	2.475	2.775	3.075		53.34	58.42	62.87	70.49	78.11	
25/50	2.400	2.600	2.775	3.075	3.375		60.96	66.04	70.49	78.11	85.73	
26/52	2.500	2.700	2.875	3.175	3.475		63.50	68.58	73.03	80.65	88.27	
28/56	2.700	2.900	3.075	3.375	3.675		68.58	73.66	78.11	85.73	93.35	
30/60	2.900	3.100	3.275	3.575	3.875	0.400	73.66	78.74	83.19	90.81	98.43	10.16
31/62	3.000	3.200	3.375	3.675	3.975		76.20	81.28	85.73	93.35	100.97	
35/70	3.400	3.600	3.775	4.075	4.375		86.36	91.44	95.89	103.51	111.13	
36/72	3.500	3.700	3.875	4.175	4.475		88.90	93.98	98.43	106.05	113.67	
40/80	3.900	4.100	4.275	4.575	4.875		99.06	104.14	108.59	116.21	123.83	
43/86	4.200	4.400	4.575	4.875	5.175		106.68	111.76	116.21	123.83	131.45	
44/88	4.300	4.500	4.675	4.975	5.275		109.22	114.30	118.75	126.37	133.99	
49/98	4.800	5.000	5.175	5.475	5.775		121.92	127.00	131.45	139.07	146.69	
50/100	4.900	5.100	5.275	5.575	5.875		124.46	129.54	133.99	141.61	149.23	
60/120	5.900	6.100	6.275	6.575	6.875		149.86	154.94	159.39	167.01	174.63	
65/130	6.400	6.600	6.775	7.075	7.375		162.56	167.64	172.09	179.71	187.33	



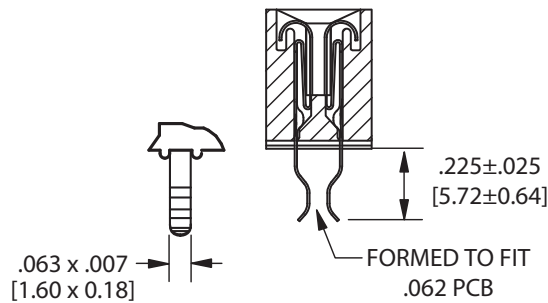
**.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Card Extender**

SPECIFICATIONS

- Accommodates $.062" \pm .008" [1.57 \pm 0.20]$ PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0003-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



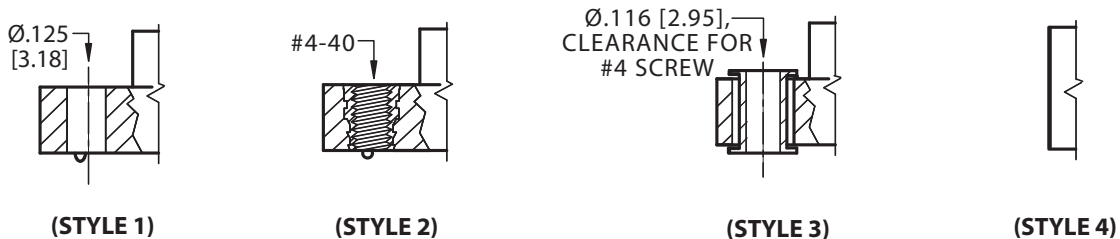
TERMINATION TYPE



CARD EXTENDER (SE)

Example P/N: MP~~S~~L-0100-10-D~~S~~E-1K

MOUNTING STYLE



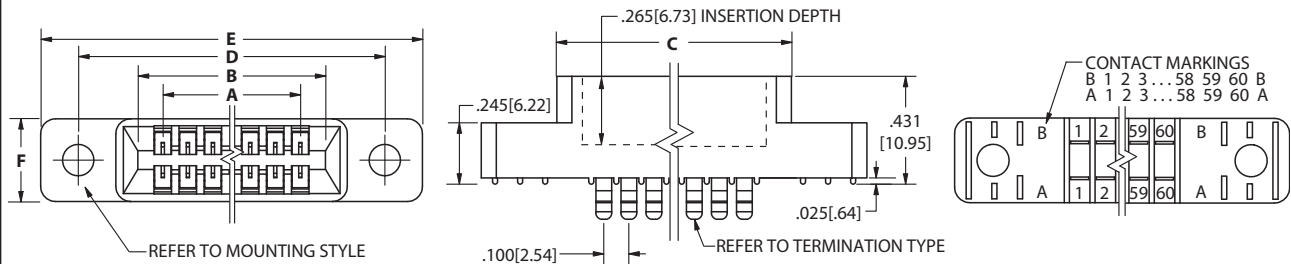


PART NUMBER CODING

PLATING - RoHS Compliant All Platings are Lead Free and have .000050" Nickel Underplate Contact Surface Termination *MPSL = .000010" Gold .000100" Pure Tin Matte *MPL = .000100" Overall Pure Tin, Matte MP = .000010" Overall Gold * Requires 'K' Modification Code Other Plating and thicknesses available upon request	INSULATOR MATERIAL** 0 = PBT	CONTACT CENTERS 100 = .100" [2.54mm]	NUMBER OF POSITIONS Contacts Per Row (See Position Chart Below)	MPSL - 0 100 - 10 - D SE - 1 K	PLATING MODIFICATION CODE** K = Required on Tin Plating Omit for MP Plating (Overall Gold)	MOUNTING STYLE (See Opposite Page) 1 = .125" Clearance Hole 2 = #4-40 Threaded Insert 3 = Floating Bobbin 4 = No Mounting	TERMINATION TYPE (See Opposite Page) SE = Card Extender	READOUT D = Dual
--	--	--	---	---------------------------------------	---	--	---	----------------------------

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



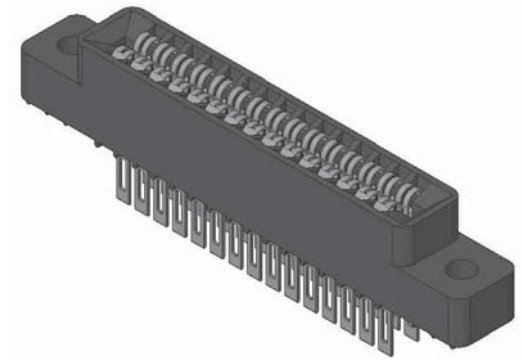
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
05/10	0.400	0.600	0.775	1.075	1.375	0.330	10.16	15.24	19.69	27.31	34.93	8.38
06/12	0.500	0.700	0.875	1.175	1.475		12.70	17.78	22.23	29.85	37.47	
07/14	0.600	0.800	0.975	1.275	1.575		15.24	20.32	24.77	32.39	40.01	
08/16	0.700	0.900	1.075	1.375	1.675		17.78	22.86	27.31	34.93	42.55	
10/20	0.900	1.100	1.275	1.575	1.875		22.86	27.94	32.39	40.01	47.63	
12/24	1.100	1.300	1.475	1.775	2.075		27.94	33.02	37.47	45.09	52.71	
13/26	1.200	1.400	1.575	1.875	2.175		30.48	35.56	40.01	47.63	55.25	
15/30	1.400	1.600	1.775	2.075	2.375		35.56	40.64	45.09	52.71	60.33	
17/34	1.600	1.800	1.975	2.275	2.575		40.64	45.72	50.17	57.79	65.41	
18/36	1.700	1.900	2.075	2.375	2.675		43.18	48.26	52.71	60.33	67.95	
19/38	1.800	2.000	2.175	2.475	2.775		45.72	50.80	55.25	62.87	70.49	
20/40	1.900	2.100	2.275	2.575	2.875		48.26	53.34	57.79	65.41	73.03	
22/44	2.100	2.300	2.475	2.775	3.075		53.34	58.42	62.87	70.49	78.11	
25/50	2.400	2.600	2.775	3.075	3.375		60.96	66.04	70.49	78.11	85.73	
26/52	2.500	2.700	2.875	3.175	3.475		63.50	68.58	73.03	80.65	88.27	
28/56	2.700	2.900	3.075	3.375	3.675		68.58	73.66	78.11	85.73	93.35	
30/60	2.900	3.100	3.275	3.575	3.875	0.400	73.66	78.74	83.19	90.81	98.43	10.16
31/62	3.000	3.200	3.375	3.675	3.975		76.20	81.28	85.73	93.35	100.97	
35/70	3.400	3.600	3.775	4.075	4.375		86.36	91.44	95.89	103.51	111.13	
36/72	3.500	3.700	3.875	4.175	4.475		88.90	93.98	98.43	106.05	113.67	
40/80	3.900	4.100	4.275	4.575	4.875		99.06	104.14	108.59	116.21	123.83	
43/86	4.200	4.400	4.575	4.875	5.175		106.68	111.76	116.21	123.83	131.45	
44/88	4.300	4.500	4.675	4.975	5.275		109.22	114.30	118.75	126.37	133.99	
49/98	4.800	5.000	5.175	5.475	5.775		121.92	127.00	131.45	139.07	146.69	
50/100	4.900	5.100	5.275	5.575	5.875		124.46	129.54	133.99	141.61	149.23	
60/120	5.900	6.100	6.275	6.575	6.875		149.86	154.94	159.39	167.01	174.63	
65/130	6.400	6.600	6.775	7.075	7.375		162.56	167.64	172.09	179.71	187.33	



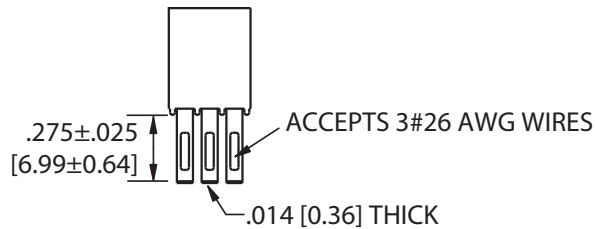
.100" [2.54 mm] Contact Centers, .431" [10.95 mm] Insulator Height, Eyelet

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and
- Part Number Coding See Pages 98-99
- P/N 04-0003-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



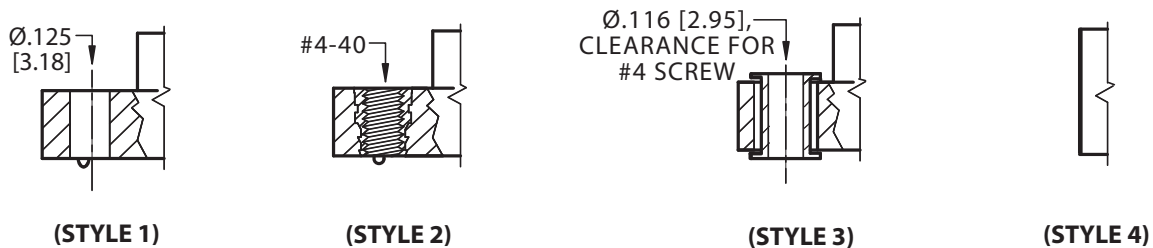
TERMINATION TYPE



EYELET (P)

Example P/N: MP-0100-10-DP-1

MOUNTING STYLE





PART NUMBER CODING

MPL - 0 100 - 10 - D P - 1 K

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

*MPL = .000100" Overall Pure Tin, Matte

MP = .000010" Overall Gold

* Requires 'K' Modification Code

Other Plating and thicknesses available upon request

INSULATOR MATERIAL**

0 = PBT

CONTACT CENTERS

100 = .100" [2.54mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

PLATING MODIFICATION CODE**

K = Required on Tin Plating

Omit for MP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)

1 = .125" Clearance Hole

2 = #4-40 Threaded Insert

3 = Floating Bobbin

4 = No Mounting

TERMINATION TYPE (See Opposite Page)

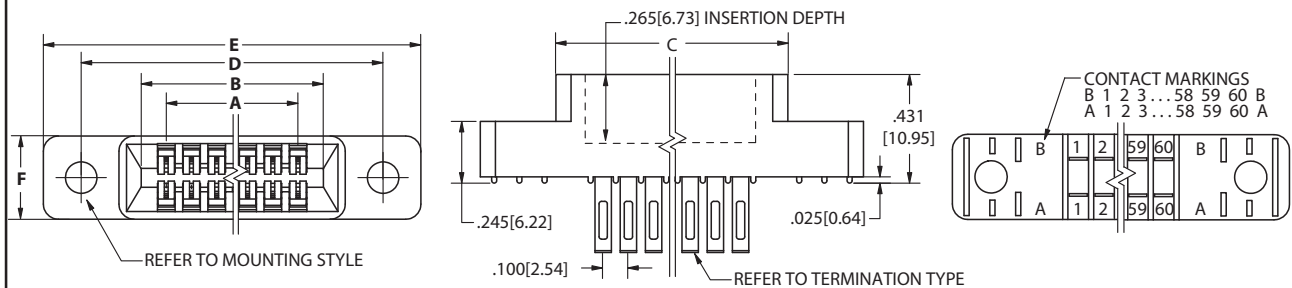
P = Pierced Eyelet, .014" Thick

READOUT

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



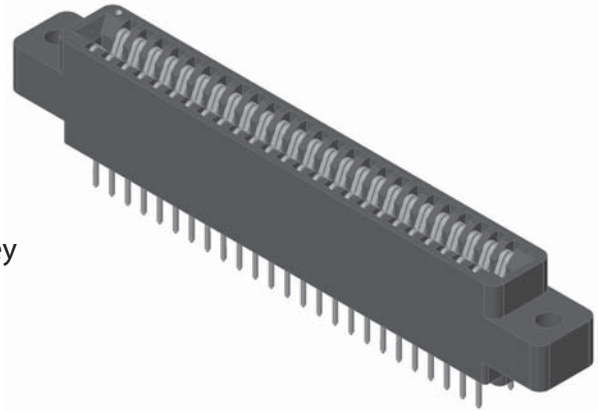
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
05/10	0.400	0.600	0.775	1.075	1.375	0.330	10.16	15.24	19.69	27.31	34.93	8.38
06/12	0.500	0.700	0.875	1.175	1.475		12.70	17.78	22.23	29.85	37.47	
07/14	0.600	0.800	0.975	1.275	1.575		15.24	20.32	24.77	32.39	40.01	
08/16	0.700	0.900	1.075	1.375	1.675		17.78	22.86	27.31	34.93	42.55	
10/20	0.900	1.100	1.275	1.575	1.875		22.86	27.94	32.39	40.01	47.63	
12/24	1.100	1.300	1.475	1.775	2.075		27.94	33.02	37.47	45.09	52.71	
13/26	1.200	1.400	1.575	1.875	2.175		30.48	35.56	40.01	47.63	55.25	
15/30	1.400	1.600	1.775	2.075	2.375		35.56	40.64	45.09	52.71	60.33	
17/34	1.600	1.800	1.975	2.275	2.575		40.64	45.72	50.17	57.79	65.41	
18/36	1.700	1.900	2.075	2.375	2.675		43.18	48.26	52.71	60.33	67.95	
19/38	1.800	2.000	2.175	2.475	2.775		45.72	50.80	55.25	62.87	70.49	
20/40	1.900	2.100	2.275	2.575	2.875		48.26	53.34	57.79	65.41	73.03	
22/44	2.100	2.300	2.475	2.775	3.075		53.34	58.42	62.87	70.49	78.11	
25/50	2.400	2.600	2.775	3.075	3.375		60.96	66.04	70.49	78.11	85.73	
26/52	2.500	2.700	2.875	3.175	3.475		63.50	68.58	73.03	80.65	88.27	
28/56	2.700	2.900	3.075	3.375	3.675		68.58	73.66	78.11	85.73	93.35	
30/60	2.900	3.100	3.275	3.575	3.875	0.400	73.66	78.74	83.19	90.81	98.43	10.16
31/62	3.000	3.200	3.375	3.675	3.975		76.20	81.28	85.73	93.35	100.97	
35/70	3.400	3.600	3.775	4.075	4.375		86.36	91.44	95.89	103.51	111.13	
36/72	3.500	3.700	3.875	4.175	4.475		88.90	93.98	98.43	106.05	113.67	
40/80	3.900	4.100	4.275	4.575	4.875		99.06	104.14	108.59	116.21	123.83	
43/86	4.200	4.400	4.575	4.875	5.175		106.68	111.76	116.21	123.83	131.45	
44/88	4.300	4.500	4.675	4.975	5.275		109.22	114.30	118.75	126.37	133.99	
49/98	4.800	5.000	5.175	5.475	5.775		121.92	127.00	131.45	139.07	146.69	
50/100	4.900	5.100	5.275	5.575	5.875		124.46	129.54	133.99	141.61	149.23	
60/120	5.900	6.100	6.275	6.575	6.875		149.86	154.94	159.39	167.01	174.63	
65/130	6.400	6.600	6.775	7.075	7.375		162.56	167.64	172.09	179.71	187.33	



**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Wire Wrap & Dip Solder**

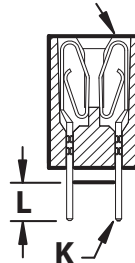
SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 ± 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



TERMINATION TYPE

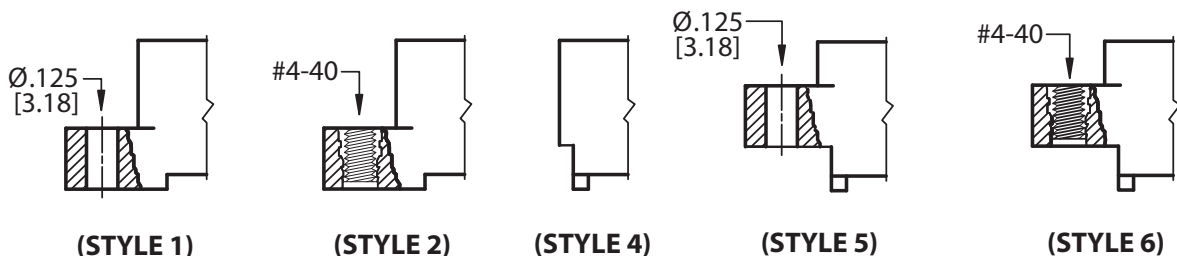
LOOP BELLOWS



LOOP BELLOWS

TERMINATION CODE	MODIFICATION CODE	TYPE	POST CROSS SECTION K	POST LENGTH L	FITS MIN. HOLE SIZE	EXAMPLE PART NUMBER
R	H	Dip Solder	.026 [0.66] Round	.190 [4.83]	.030 [0.76]	<i>MPSL-0100-10-DR-1HK</i>
R	H(.165)	Dip Solder	.026 [0.66] Round	.165 [4.19]	.030 [0.76]	<i>MPSL-0100-10-DR-1HK(.165)</i>
W	H	Dip Solder	.025 [0.64] Square	.190 [4.83]	.040 [1.02]	<i>MPSL-0100-10-DW-1HK</i>
W	OMIT	Wire Wrap	.025 [0.64] Square	.560 [14.20]	.040 [1.02]	<i>MPSL-0100-10-DW-1K</i>

MOUNTING STYLE





PART NUMBER CODING

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate

PLATING MODIFICATION CODE**
K = Required on MP SL or MPL Plating
Omit for MP Plating (Overall Gold)

MODIFICATION CODE**
(See Opposite Page)
H = Dip Solder .190[4.83] Tail Length
(.026 Round or .025 Square)
H(.165) = Dip Solder .165[4.19] Tail Length
(.026 Round Only)

INSULATOR MATERIAL**
0 = PBT

CONTACT CENTERS
100 = .100" [2.54mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

READOUT
D = Dual

TERMINATION TYPE (See Opposite Page)
LOOP BELLOWS
R = .026[.66mm] Round
W = .025[.64mm] Square

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate

PLATING MODIFICATION CODE**
K = Required on MP SL or MPL Plating
Omit for MP Plating (Overall Gold)

MODIFICATION CODE**
(See Opposite Page)
H = Dip Solder .190[4.83] Tail Length
(.026 Round or .025 Square)
H(.165) = Dip Solder .165[4.19] Tail Length
(.026 Round Only)

INSULATOR MATERIAL**
0 = PBT

CONTACT CENTERS
100 = .100" [2.54mm]

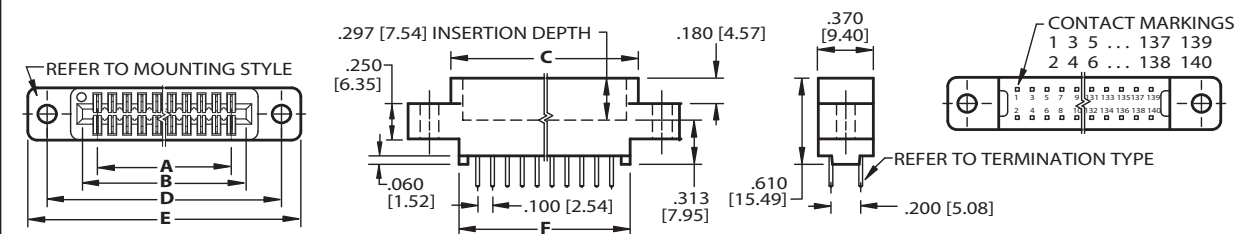
NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

READOUT
D = Dual

TERMINATION TYPE (See Opposite Page)
LOOP BELLOWS
R = .026[.66mm] Round
W = .025[.64mm] Square

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



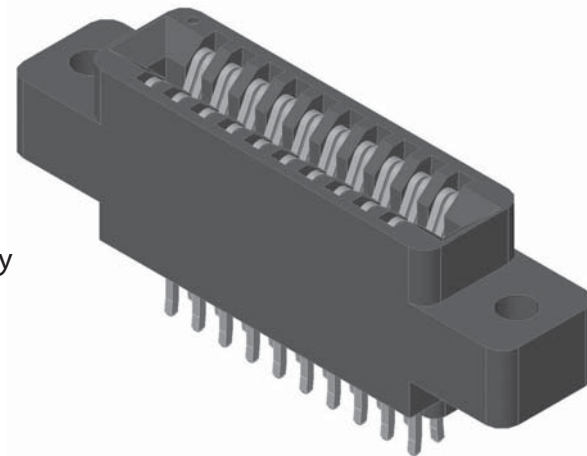
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.750	12.70	17.78	21.84	29.85	36.45	19.05
08/16	0.700	0.900	1.060	1.375	1.635	0.950	17.78	22.86	26.92	34.93	41.53	24.13
10/20	0.900	1.100	1.260	1.575	1.835	1.150	22.86	27.94	32.00	40.01	46.61	29.21
12/24	1.100	1.300	1.460	1.775	2.035	1.350	27.94	33.02	37.08	45.09	51.69	34.29
13/26	1.200	1.400	1.560	1.875	2.135	1.450	30.48	35.56	39.62	47.63	54.23	36.83
15/30	1.400	1.600	1.760	2.075	2.335	1.650	35.56	40.64	44.70	52.71	59.31	41.91
17/34	1.600	1.800	1.960	2.275	2.535	1.850	40.64	45.72	49.78	57.79	64.39	46.99
18/36	1.700	1.900	2.060	2.375	2.635	1.950	43.18	48.26	52.32	60.33	66.93	49.53
20/40	1.900	2.100	2.260	2.575	2.835	2.150	48.26	53.34	57.40	65.41	72.01	54.61
22/44	2.100	2.300	2.460	2.775	3.035	2.350	53.34	58.42	62.48	70.49	77.09	59.69
24/48	2.300	2.500	2.660	2.975	3.235	2.550	58.42	63.50	67.56	75.57	82.17	64.77
25/50	2.400	2.600	2.760	3.075	3.335	2.650	60.96	66.04	70.10	78.11	84.71	67.31
28/56	2.700	2.900	3.060	3.375	3.635	2.950	68.58	73.66	77.72	85.73	92.33	74.93
30/60	2.900	3.100	3.260	3.575	3.835	3.150	73.66	78.74	82.80	90.81	97.41	80.01
31/62	3.000	3.200	3.360	3.675	3.935	3.250	76.20	81.28	85.34	93.35	99.95	82.55
35/70	3.400	3.600	3.760	4.075	4.335	3.650	86.36	91.44	95.50	103.51	110.11	92.71
36/72	3.500	3.700	3.860	4.175	4.435	3.750	88.90	93.98	98.04	106.05	112.65	95.25
40/80	3.900	4.100	4.260	4.575	4.835	4.150	99.06	104.14	108.20	116.21	122.81	105.41
43/86	4.200	4.400	4.560	4.875	5.135	4.450	106.68	111.76	115.82	123.83	130.43	113.03
44/88	4.300	4.500	4.660	4.975	5.235	4.550	109.22	114.30	118.36	126.37	132.97	115.57
50/100	4.900	5.100	5.260	5.575	5.835	5.150	124.46	129.54	133.60	141.61	148.21	130.81
55/110	5.400	5.600	5.760	6.075	6.335	5.650	137.16	142.24	146.30	154.31	160.91	143.51
60/120	5.900	6.100	6.260	6.575	6.835	6.150	149.86	154.94	159.00	167.01	173.61	156.21
61/122	6.000	6.200	6.360	6.675	6.935	6.250	152.40	157.48	161.54	169.55	176.15	158.75
65/130	6.400	6.600	6.760	7.075	7.335	6.650	162.56	167.64	171.70	179.71	186.31	168.91
70/140	6.900	7.100	7.260	7.575	7.835	7.150	175.26	180.34	184.40	192.41	199.01	181.61



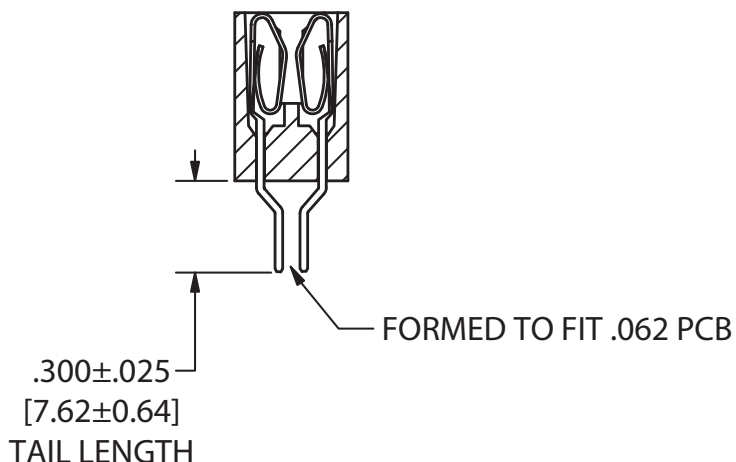
**.100" [2.54 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [.64 mm] Square Card Extender**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

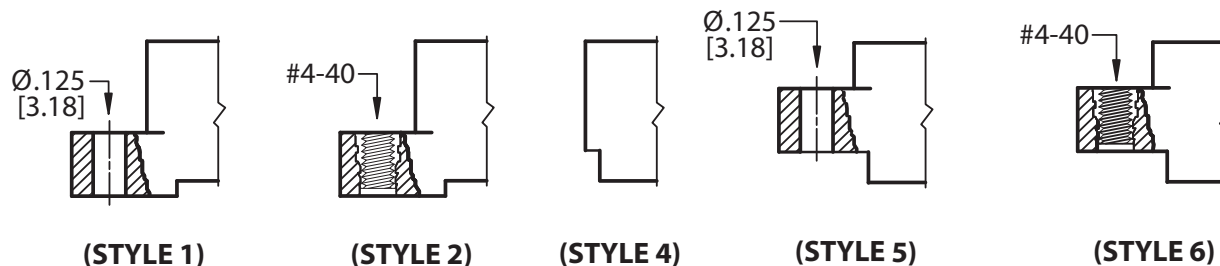


TERMINATION TYPE



Example P/N: MP~~SL~~-0100-10-D~~WE~~-4K~~TT~~

MOUNTING STYLE



**.100" [2.54 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [.64 mm] Square Card Extender**

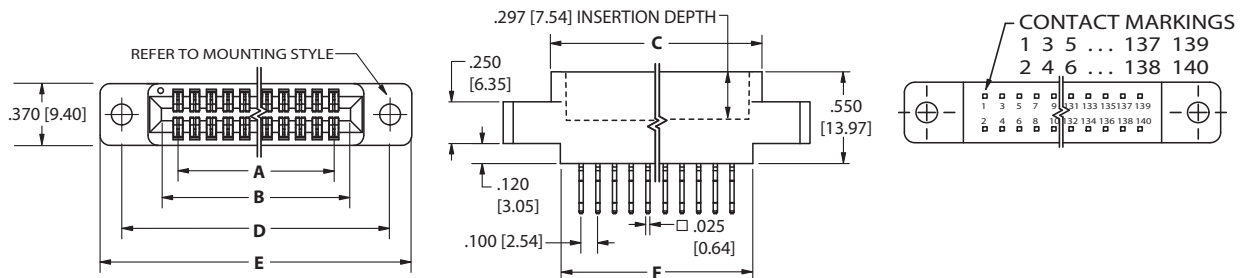


PART NUMBER CODING

PLATING - RoHS Compliant All Platings are Lead Free and have .000050" Nickel Underplate	MODIFICATION CODE** TT = No Standoffs
CONTACT SURFACE *MPSL = .000010" Gold *MPL = .000100" Overall Pure Tin, Matte MP = .000010" Overall Gold	PLATING MODIFICATION CODE** K = Required on MPSL or MPL Plating Omit for MP Plating (Overall Gold)
TERMINATION *Requires 'K' Modification Code	MOUNTING STYLE (See Opposite Page) 1 = .125" Clearance Hole 2 = #4-40 Threaded Insert 4 = No Mounting 5 = Raised, .125" Clearance Hole 6 = Raised, #4-40 Threaded Insert
INSULATOR MATERIAL** 0 = PBT	TERMINATION TYPE (See Opposite Page) WE = Card Extender
CONTACT CENTERS 100 = .100" [2.54mm]	
NUMBER OF POSITIONS Contacts Per Row (See Position Chart Below)	
READOUT D = Dual	

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



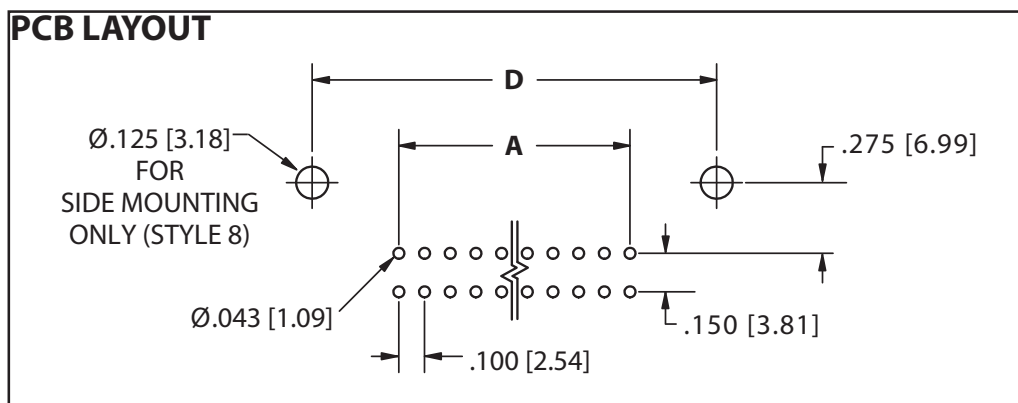
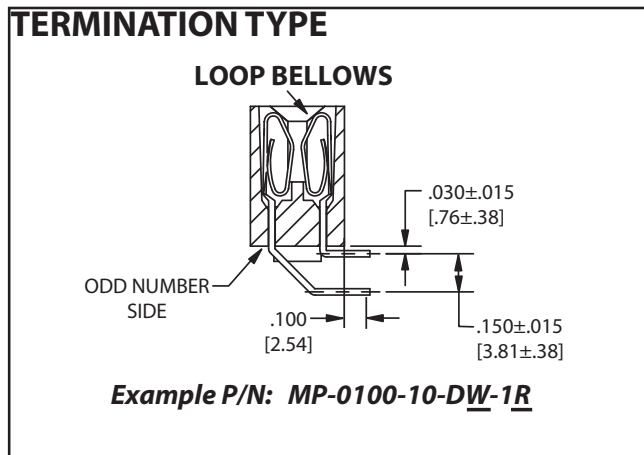
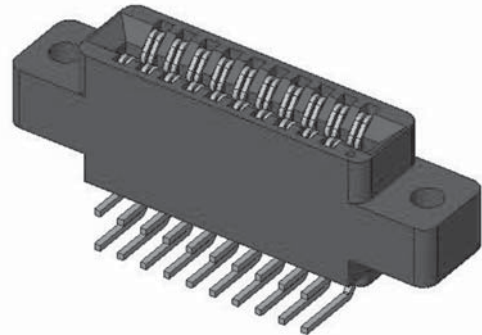
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.750	12.70	17.78	21.84	29.85	36.45	19.05
08/16	0.700	0.900	1.060	1.375	1.635	0.950	17.78	22.86	26.92	34.93	41.53	24.13
10/20	0.900	1.100	1.260	1.575	1.835	1.150	22.86	27.94	32.00	40.01	46.61	29.21
12/24	1.100	1.300	1.460	1.775	2.035	1.350	27.94	33.02	37.08	45.09	51.69	34.29
13/26	1.200	1.400	1.560	1.875	2.135	1.450	30.48	35.56	39.62	47.63	54.23	36.83
15/30	1.400	1.600	1.760	2.075	2.335	1.650	35.56	40.64	44.70	52.71	59.31	41.91
17/34	1.600	1.800	1.960	2.275	2.535	1.850	40.64	45.72	49.78	57.79	64.39	46.99
18/36	1.700	1.900	2.060	2.375	2.635	1.950	43.18	48.26	52.32	60.33	66.93	49.53
20/40	1.900	2.100	2.260	2.575	2.835	2.150	48.26	53.34	57.40	65.41	72.01	54.61
22/44	2.100	2.300	2.460	2.775	3.035	2.350	53.34	58.42	62.48	70.49	77.09	59.69
24/48	2.300	2.500	2.660	2.975	3.235	2.550	58.42	63.50	67.56	75.57	82.17	64.77
25/50	2.400	2.600	2.760	3.075	3.335	2.650	60.96	66.04	70.10	78.11	84.71	67.31
28/56	2.700	2.900	3.060	3.375	3.635	2.950	68.58	73.66	77.72	85.73	92.33	74.93
30/60	2.900	3.100	3.260	3.575	3.835	3.150	73.66	78.74	82.80	90.81	97.41	80.01
31/62	3.000	3.200	3.360	3.675	3.935	3.250	76.20	81.28	85.34	93.35	99.95	82.55
35/70	3.400	3.600	3.760	4.075	4.335	3.650	86.36	91.44	95.50	103.51	110.11	92.71
36/72	3.500	3.700	3.860	4.175	4.435	3.750	88.90	93.98	98.04	106.05	112.65	95.25
40/80	3.900	4.100	4.260	4.575	4.835	4.150	99.06	104.14	108.20	116.21	122.81	105.41
43/86	4.200	4.400	4.560	4.875	5.135	4.450	106.68	111.76	115.82	123.83	130.43	113.03
44/88	4.300	4.500	4.660	4.975	5.235	4.550	109.22	114.30	118.36	126.37	132.97	115.57
50/100	4.900	5.100	5.260	5.575	5.835	5.150	124.46	129.54	133.60	141.61	148.21	130.81
55/110	5.400	5.600	5.760	6.075	6.335	5.650	137.16	142.24	146.30	154.31	160.91	143.51
60/120	5.900	6.100	6.260	6.575	6.835	6.150	149.86	154.94	159.00	167.01	173.61	156.21
61/122	6.000	6.200	6.360	6.675	6.935	6.250	152.40	157.48	161.54	169.55	176.15	158.75
65/130	6.400	6.600	6.760	7.075	7.335	6.650	162.56	167.64	171.70	179.71	186.31	168.91
70/140	6.900	7.100	7.260	7.575	7.835	7.150	175.26	180.34	184.40	192.41	199.01	181.61



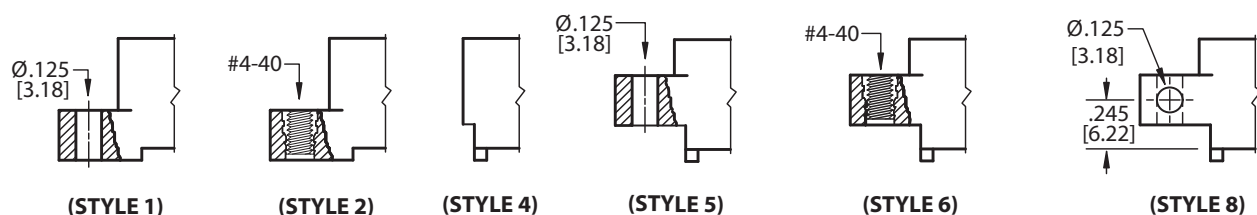
**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Right Angle**

SPECIFICATIONS

- Accommodates $.062" \pm .008" [1.57 \pm 0.20]$ PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



MOUNTING STYLE





PART NUMBER CODING

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface **Termination**
*MPSL = .000010" Gold .000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold
*Requires 'K' Modification Code

INSULATOR MATERIAL**

0 = PBT

CONTACT CENTERS

100 = .100" [2.54mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

READOUT

D = Dual

MPSL - 0 100 - 10 - D W - 1 K R

MODIFICATION CODE**
R = Right Angle

PLATING MODIFICATION CODE**
K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)

- 1 = .125" Clearance Hole
- 2 = #4-40 Threaded Insert
- 4 = No Mounting
- 5 = Raised, .125" Clearance Hole
- 6 = Raised, #4-40 Threaded Insert
- 8 = Raised, Side Mounting, .125" Clearance Hole

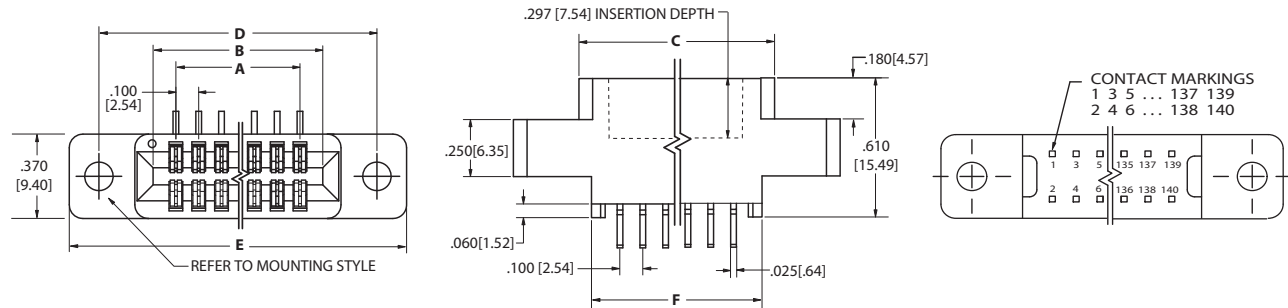
TERMINATION TYPE (See Opposite Page)

LOOP BELLOWS

W = .025 [.64] Square

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



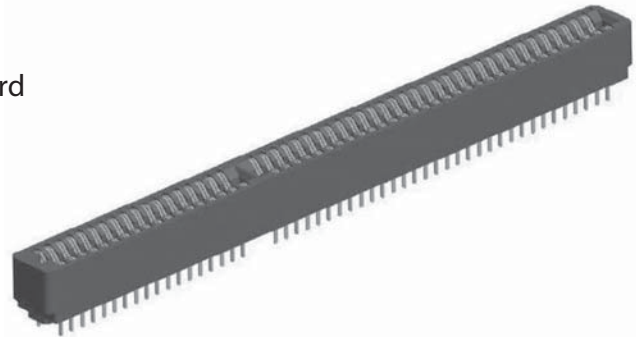
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.500	0.700	0.860	1.175	1.435	0.750	12.70	17.78	21.84	29.85	36.45	19.05
08/16	0.700	0.900	1.060	1.375	1.635	0.950	17.78	22.86	26.92	34.93	41.53	24.13
10/20	0.900	1.100	1.260	1.575	1.835	1.150	22.86	27.94	32.00	40.01	46.61	29.21
12/24	1.100	1.300	1.460	1.775	2.035	1.350	27.94	33.02	37.08	45.09	51.69	34.29
13/26	1.200	1.400	1.560	1.875	2.135	1.450	30.48	35.56	39.62	47.63	54.23	36.83
15/30	1.400	1.600	1.760	2.075	2.335	1.650	35.56	40.64	44.70	52.71	59.31	41.91
17/34	1.600	1.800	1.960	2.275	2.535	1.850	40.64	45.72	49.78	57.79	64.39	46.99
18/36	1.700	1.900	2.060	2.375	2.635	1.950	43.18	48.26	52.32	60.33	66.93	49.53
20/40	1.900	2.100	2.260	2.575	2.835	2.150	48.26	53.34	57.40	65.41	72.01	54.61
22/44	2.100	2.300	2.460	2.775	3.035	2.350	53.34	58.42	62.48	70.49	77.09	59.69
24/48	2.300	2.500	2.660	2.975	3.235	2.550	58.42	63.50	67.56	75.57	82.17	64.77
25/50	2.400	2.600	2.760	3.075	3.335	2.650	60.96	66.04	70.10	78.11	84.71	67.31
28/56	2.700	2.900	3.060	3.375	3.635	2.950	68.58	73.66	77.72	85.73	92.33	74.93
30/60	2.900	3.100	3.260	3.575	3.835	3.150	73.66	78.74	82.80	90.81	97.41	80.01
31/62	3.000	3.200	3.360	3.675	3.935	3.250	76.20	81.28	85.34	93.35	99.95	82.55
35/70	3.400	3.600	3.760	4.075	4.335	3.650	86.36	91.44	95.50	103.51	110.11	92.71
36/72	3.500	3.700	3.860	4.175	4.435	3.750	88.90	93.98	98.04	106.05	112.65	95.25
40/80	3.900	4.100	4.260	4.575	4.835	4.150	99.06	104.14	108.20	116.21	122.81	105.41
43/86	4.200	4.400	4.560	4.875	5.135	4.450	106.68	111.76	115.82	123.83	130.43	113.03
44/88	4.300	4.500	4.660	4.975	5.235	4.550	109.22	114.30	118.36	126.37	132.97	115.57
50/100	4.900	5.100	5.260	5.575	5.835	5.150	124.46	129.54	133.60	141.61	148.21	130.81
55/110	5.400	5.600	5.760	6.075	6.335	5.650	137.16	142.24	146.30	154.31	160.91	143.51
60/120	5.900	6.100	6.260	6.575	6.835	6.150	149.86	154.94	159.00	167.01	173.61	156.21
61/122	6.000	6.200	6.360	6.675	6.935	6.250	152.40	157.48	161.54	169.55	176.15	158.75
65/130	6.400	6.600	6.760	7.075	7.335	6.650	162.56	167.64	171.70	179.71	186.31	168.91
70/140	6.900	7.100	7.260	7.575	7.835	7.150	175.26	180.34	184.40	192.41	199.01	181.61



**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Special 18/31 with Barrier, Dip Solder/Wire Wrap, [ISA]**

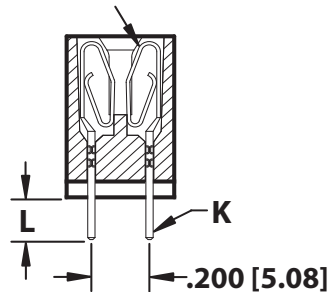
SPECIFICATIONS

- ISA Connector
- Accommodates .062" $\pm$.008" [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



TERMINATION TYPE

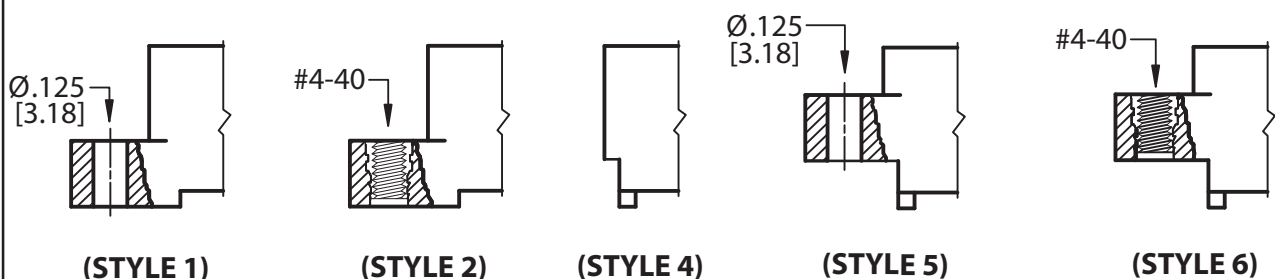
LOOP BELLOWS



LOOP BELLOWS

TERMINATION CODE	MODIFICATION CODE	TYPE	POST CROSS SECTION K	POST LENGTH L	FITS MIN. HOLE SIZE	EXAMPLE PART NUMBER
R	H	Dip Solder	.026 [0.66] Round	.190 [4.83]	.030 [0.76]	<i>MPSL-0100-18/31-DR-1HK</i>
R	H(.165)	Dip Solder	.026 [0.66] Round	.165 [4.19]	.030 [0.76]	<i>MPSL-0100-18/31-DR-1HK(.165)</i>
W	H	Dip Solder	.025 [0.64] Square	.190 [4.83]	.040 [1.02]	<i>MPSL-0100-18/31-DW-1HK</i>
W	OMIT	Wire Wrap	.025 [0.64] Square	.560 [14.20]	.040 [1.02]	<i>MPSL-0100-18/31-DW-1K</i>

MOUNTING STYLE



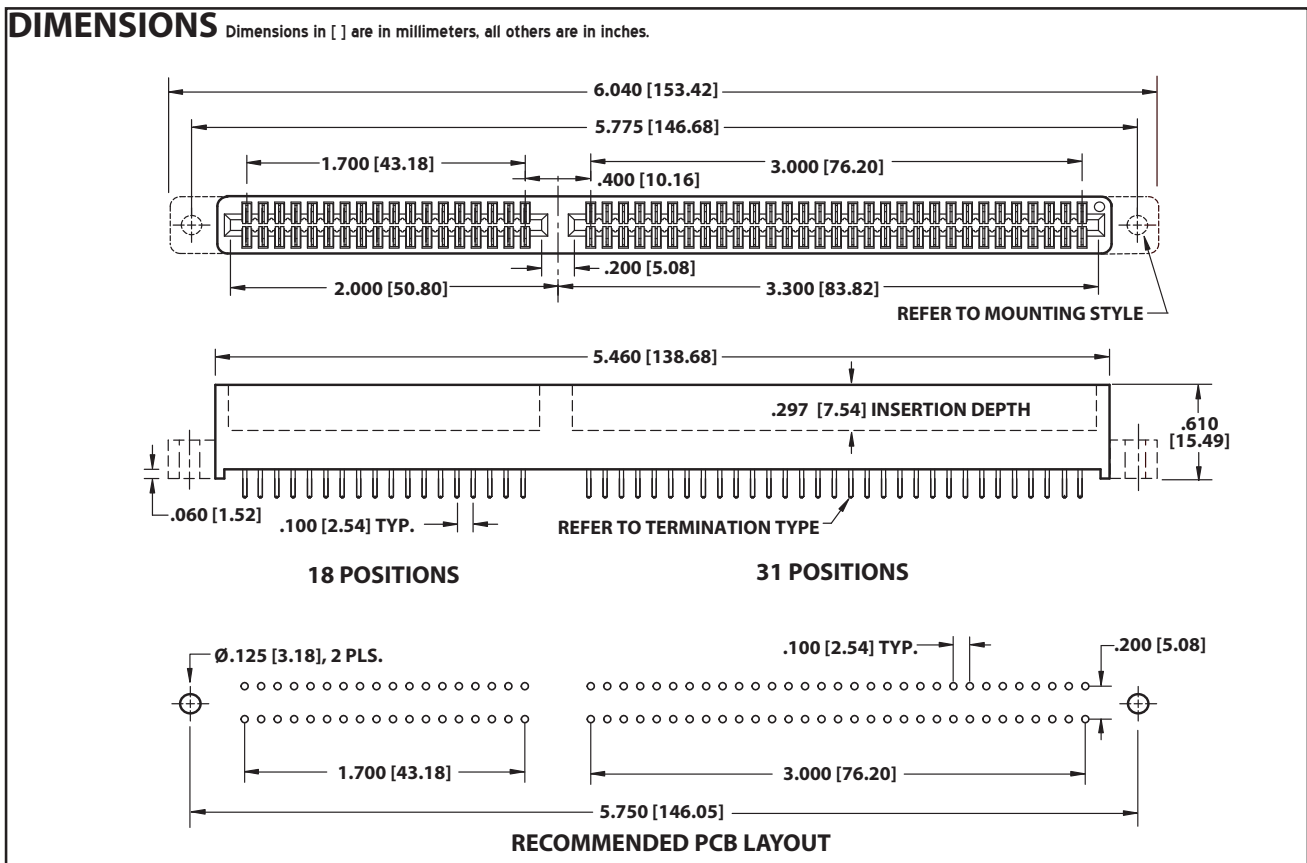


**.100" [2.54 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Special 18/31 with Barrier, Dip Solder/Wire Wrap, [ISA]**

PART NUMBER CODING

PLATING - RoHS Compliant All Platings are Lead Free and have .000050" Nickel Underplate		PLATING MODIFICATION CODE** K = Required on MPSSL or MPL Plating Omit for MP Plating (Overall Gold)	
CONTACT SURFACE	TERMINATION	MODIFICATION CODE** (See Opposite Page) H = Dip Solder .190[4.83] Tail Length (.026 Round or .025 Square) H(.165) = Dip Solder .165[4.19] Tail Length (.026 Round Only)	
*MPSSL = .000010" Gold	.000100" Pure Tin, Matte	MOUNTING STYLE (See Opposite Page) 1 = .125" Clearance Hole 2 = #4-40 Threaded Insert 4 = No Mounting 5 = Raised, .125" Clearance Hole 6 = Raised, #4-40 Threaded Insert	
*MPL = .000100" Overall Pure Tin, Matte		TERMINATION TYPE (See Opposite Page) LOOP BELLOWS R = .026[.66mm] Round W = .025[.64mm] Square	
MP = .000010" Overall Gold			
*Requires 'K' Modification Code			
INSULATOR MATERIAL** 0 = PBT			
CONTACT CENTERS 100 = .100" [2.54mm]			
NUMBER OF POSITIONS 18/31 Per Row			
READOUT D = Dual			

CONSULT FACTORY FOR RIGHT ANGLE VERSION

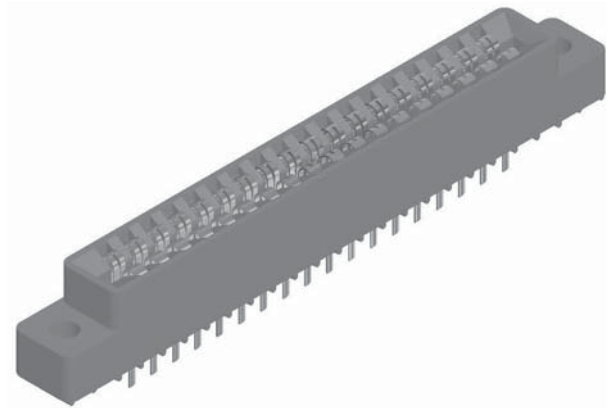




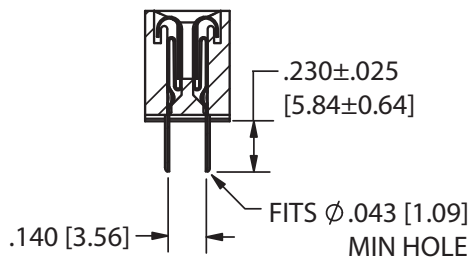
**.125" [3.18 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Dip Solder**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page Pages 98-99
- Row Spacing Available in .140" or .200"
(Use Modification Code 'X9' for .200")
- P/N 04-0003-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

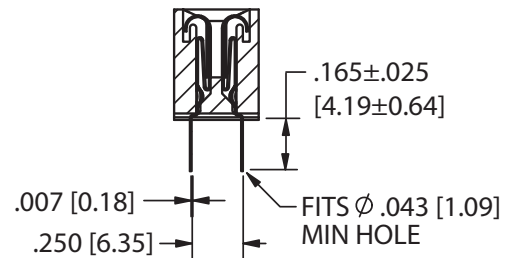


TERMINATION TYPE



DIP SOLDER (S) .140" ROW SPACING

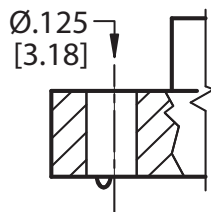
Example P/N: MP^{SL}-0125-10-DS-1K



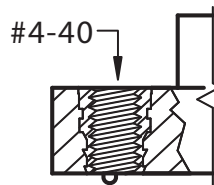
DIP SOLDER (S) .250" ROW SPACING REQUIRES 'X9' MODIFICATION CODE

Example P/N: MP^{SL}-0125-10-DS-1KX9

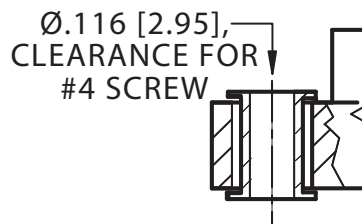
MOUNTING STYLE



(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)

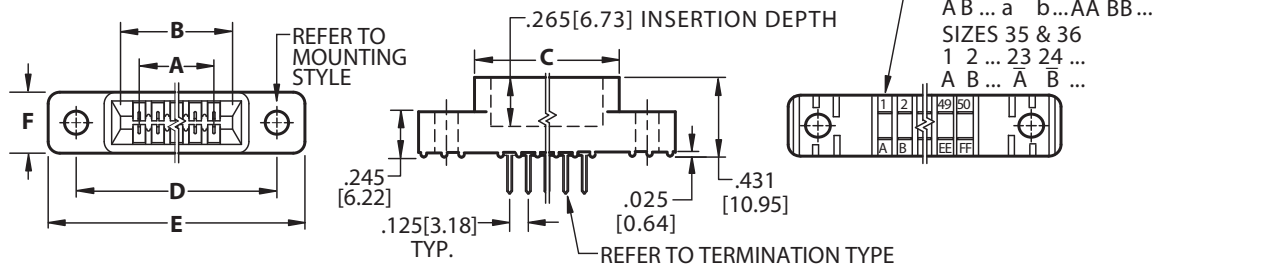


PART NUMBER CODING

MPL - 0 125 - 10 - D S - 1 K	
PLATING - RoHS Compliant	MODIFICATION CODE**
All Platings are Lead Free and have .000050" Nickel Underplate	K = Required on MPSL or MPL Plating
Contact Surface	Omit for MP Plating (Overall Gold)
*MPSL = .000010" Gold	X9 = .250" Row Spacing
*MPL = .000100" Overall Pure Tin, Matte	
MP = .000010" Overall Gold	
*Requires 'K' Modification Code	
INSULATOR MATERIAL**	MOUNTING STYLE (See Opposite Page)
0 = PBT	1 = .125" Clearance Hole
CONTACT CENTERS	2 = #4-40 Threaded Insert
125 = .125" [3.18mm]	3 = Floating Bobbin
NUMBER OF POSITIONS	4 = No Mounting
Contacts Per Row (See Position Chart Below)	TERMINATION TYPE (See Opposite Page)
	S = Dip Solder
	READOUT
	D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



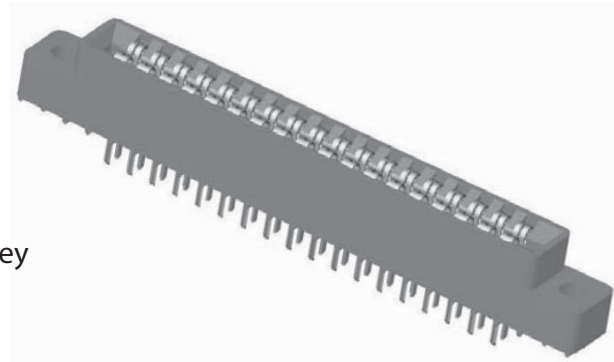
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
06/12	0.625	0.875	1.035	1.295	1.575	0.330	15.88	22.23	26.29	32.89	40.01	8.38
10/20	1.125	1.375	1.535	1.795	2.075		28.58	34.93	38.99	45.59	52.71	
14/28	1.625	1.875	2.035	2.295	2.575		41.28	47.63	51.69	58.29	65.41	
15/30	1.750	2.000	2.160	2.420	2.700		44.45	50.80	54.86	61.47	68.58	
18/36	2.125	2.375	2.535	2.795	3.075		53.98	60.33	64.39	70.99	78.11	
22/44	2.625	2.875	3.035	3.295	3.575		66.68	73.03	77.09	83.69	90.81	
28/56	3.375	3.625	3.785	4.045	4.325		85.73	92.08	96.14	102.74	109.86	
30/60	3.625	3.875	4.035	4.295	4.575		92.08	98.43	102.49	109.09	116.21	
31/62	3.750	4.000	4.160	4.420	4.700		95.25	101.60	105.66	112.27	119.38	
35/70	4.250	4.500	4.660	4.920	5.200		107.95	114.30	118.36	124.97	132.08	
36/72	4.375	4.625	4.785	5.045	5.325	0.370	111.13	117.48	121.54	128.14	135.26	9.40
37/74	4.500	4.750	4.910	5.170	5.450		114.30	120.65	124.71	131.32	138.43	
40/80	4.875	5.125	5.285	5.545	5.825		123.83	130.18	134.24	140.84	147.96	
43/86	5.250	5.500	5.660	5.920	6.200		133.35	139.70	143.76	150.37	157.48	
44/88	5.375	5.625	5.785	6.045	6.325		136.53	142.88	146.94	153.54	160.66	
49/98	6.000	6.250	6.410	6.670	6.950		152.40	158.75	162.81	169.42	176.53	
50/100	6.125	6.375	6.535	6.795	7.075		155.58	161.93	165.99	172.59	179.71	



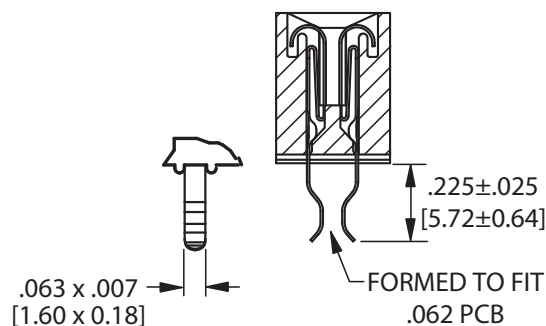
.125" [3.18 mm] Contact Centers, .431" [10.95 mm] Insulator Height, Card Extender

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0003-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



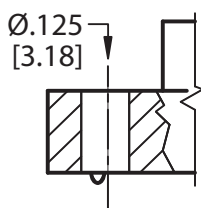
TERMINATION TYPE



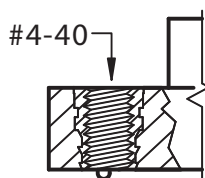
CARD EXTENDER (SE)

Example P/N:
MPSL-0125-10-DSE-1K

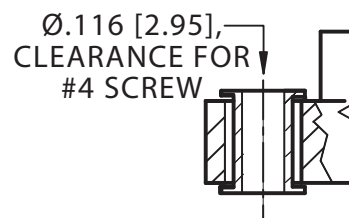
MOUNTING STYLE



(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)

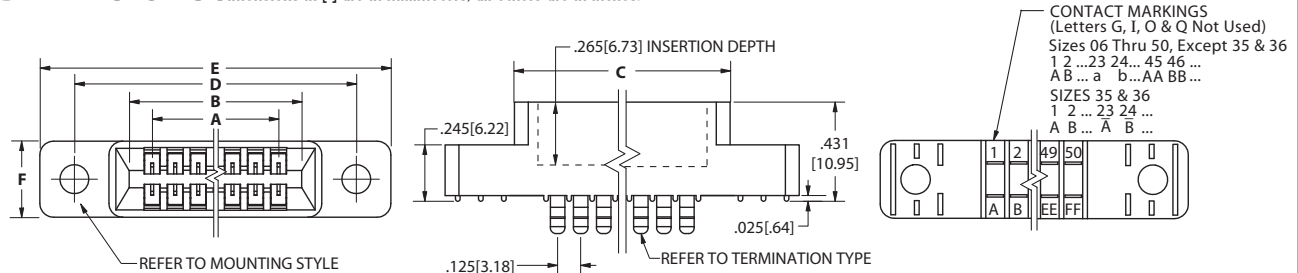


PART NUMBER CODING

PLATING - RoHS Compliant All Platings are Lead Free and have .000050" Nickel Underplate Contact Surface Termination *MPSL = .000010" Gold .000100" Pure Tin Matte *MPL = .000100" Overall Pure Tin, Matte MP = .000010" Overall Gold *Requires 'K' Modification Code Other Plating and thicknesses available upon request	INSULATOR MATERIAL** 0 = PBT	CONTACT CENTERS 125 = .125" [3.18mm]	NUMBER OF POSITIONS Contacts Per Row (See Position Chart Below)	PLATING MODIFICATION CODE** K = Required on MPSL or MPL Plating Omit for MP Plating (Overall Gold)	MOUNTING STYLE (See Opposite Page) 1 = .125" Clearance Hole 2 = #4-40 Threaded Insert 3 = Floating Bobbin 4 = No Mounting	TERMINATION TYPE (See Opposite Page) SE = Card Extender	READOUT D = Dual
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DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



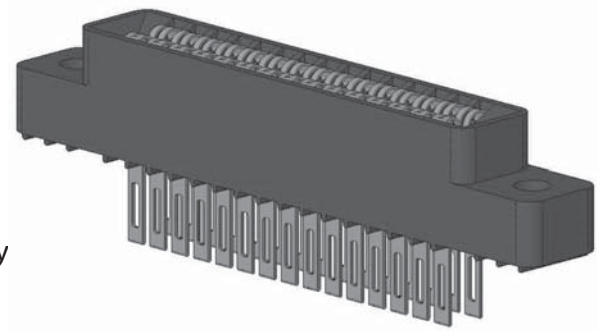
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
06/12	0.625	0.875	1.035	1.295	1.575	0.330	15.88	22.23	26.29	32.89	40.01	8.38
10/20	1.125	1.375	1.535	1.795	2.075		28.58	34.93	38.99	45.59	52.71	
14/28	1.625	1.875	2.035	2.295	2.575		41.28	47.63	51.69	58.29	65.41	
15/30	1.750	2.000	2.160	2.420	2.700		44.45	50.80	54.86	61.47	68.58	
18/36	2.125	2.375	2.535	2.795	3.075		53.98	60.33	64.39	70.99	78.11	
22/44	2.625	2.875	3.035	3.295	3.575		66.68	73.03	77.09	83.69	90.81	
28/56	3.375	3.625	3.785	4.045	4.325		85.73	92.08	96.14	102.74	109.86	
30/60	3.625	3.875	4.035	4.295	4.575		92.08	98.43	102.49	109.09	116.21	
31/62	3.750	4.000	4.160	4.420	4.700		95.25	101.60	105.66	112.27	119.38	
35/70	4.250	4.500	4.660	4.920	5.200		107.95	114.30	118.36	124.97	132.08	
36/72	4.375	4.625	4.785	5.045	5.325	0.370	111.13	117.48	121.54	128.14	135.26	9.40
37/74	4.500	4.750	4.910	5.170	5.450		114.30	120.65	124.71	131.32	138.43	
40/80	4.875	5.125	5.285	5.545	5.825		123.83	130.18	134.24	140.84	147.96	
43/86	5.250	5.500	5.660	5.920	6.200		133.35	139.70	143.76	150.37	157.48	
44/88	5.375	5.625	5.785	6.045	6.325		136.53	142.88	146.94	153.54	160.66	
49/98	6.000	6.250	6.410	6.670	6.950		152.40	158.75	162.81	169.42	176.53	
50/100	6.125	6.375	6.535	6.795	7.075		155.58	161.93	165.99	172.59	179.71	



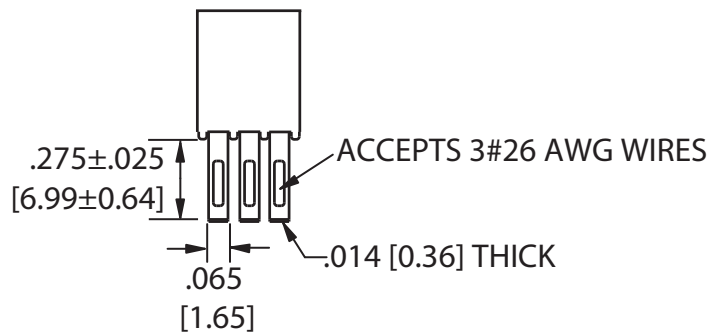
**.125" [3.18 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Eyelet**

SPECIFICATIONS

- Accommodates $.062" \pm .008" [1.57 \pm 0.20]$ PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



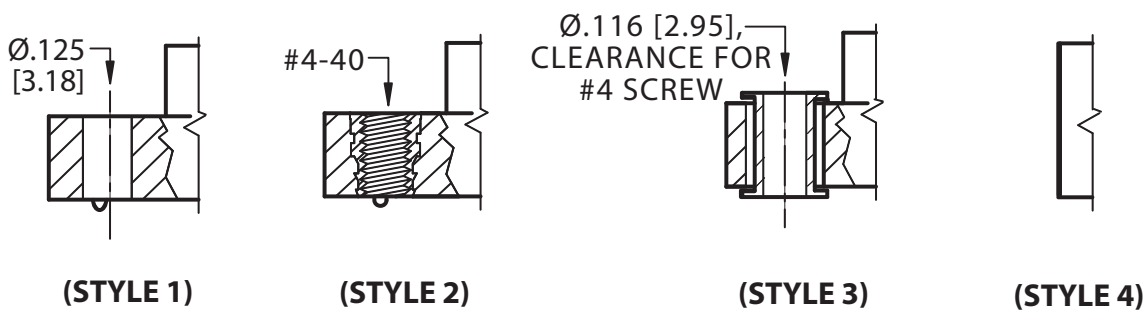
TERMINATION TYPE



EYELET (P)

**Example P/N:
MP-0125-10-DP-1**

MOUNTING STYLE





PART NUMBER CODING

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

*MPL = .000100" Overall Pure Tin, Matte

MP = .000010" Overall Gold

* Requires 'K' Modification Code

Other Plating and thicknesses available upon request

INSULATOR MATERIAL **

0 = PBT

CONTACT CENTERS

125 = .125" [3.18mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

MPL - 0 125 - 10 - D P - 1 K

PLATING MODIFICATION CODE**

K = Required on Tin Plating

Omit for MP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)

1 = .125" Clearance Hole

2 = #4-40 Threaded Insert

3 = Floating Bobbin

4 = No Mounting

TERMINATION TYPE (See Opposite Page)

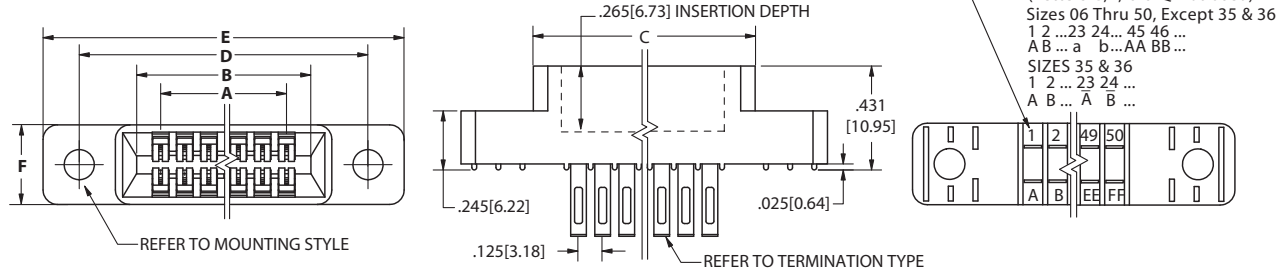
P = Pierced Eyelet, .014" Thick

READOUT

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



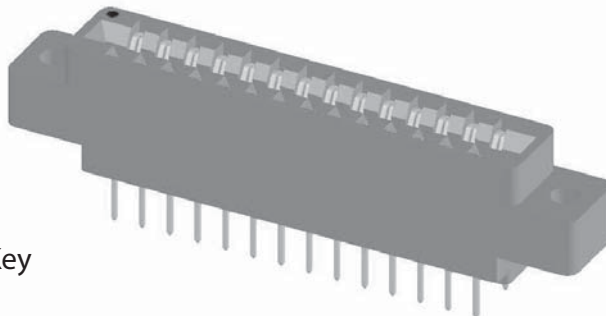
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.13
06/12	0.625	0.875	1.035	1.295	1.575	0.330	15.88	22.23	26.29	32.89	40.01	8.38
10/20	1.125	1.375	1.535	1.795	2.075		28.58	34.93	38.99	45.59	52.71	
14/28	1.625	1.875	2.035	2.295	2.575		41.28	47.63	51.69	58.29	65.41	
15/30	1.750	2.000	2.160	2.420	2.700		44.45	50.80	54.86	61.47	68.58	
18/36	2.125	2.375	2.535	2.795	3.075		53.98	60.33	64.39	70.99	78.11	
22/44	2.625	2.875	3.035	3.295	3.575		66.68	73.03	77.09	83.69	90.81	
28/56	3.375	3.625	3.785	4.045	4.325		85.73	92.08	96.14	102.74	109.86	
30/60	3.625	3.875	4.035	4.295	4.575		92.08	98.43	102.49	109.09	116.21	
31/62	3.750	4.000	4.160	4.420	4.700		95.25	101.60	105.66	112.27	119.38	
35/70	4.250	4.500	4.660	4.920	5.200		107.95	114.30	118.36	124.97	132.08	
36/72	4.375	4.625	4.785	5.045	5.325		111.13	117.48	121.54	128.14	135.26	
37/74	4.500	4.750	4.910	5.170	5.450		114.30	120.65	124.71	131.32	138.43	
40/80	4.875	5.125	5.285	5.545	5.825	0.370	123.83	130.18	134.24	140.84	147.96	9.40
43/86	5.250	5.500	5.660	5.920	6.200		133.35	139.70	143.76	150.37	157.48	
44/88	5.375	5.625	5.785	6.045	6.325		136.53	142.88	146.94	153.54	160.66	
49/98	6.000	6.250	6.410	6.670	6.950		152.40	158.75	162.81	169.42	176.53	
50/100	6.125	6.375	6.535	6.795	7.075		155.58	161.93	165.99	172.59	179.71	



**.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Wire Wrap & Dip Solder**

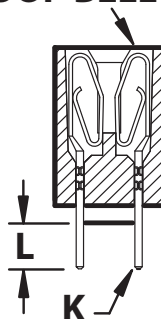
SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



TERMINATION TYPE

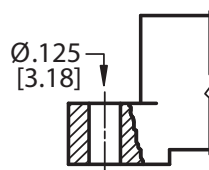
LOOP BELLOWS



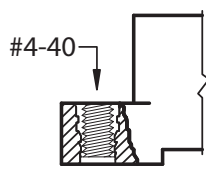
LOOP BELLOWS

TERMINATION CODE	MODIFICATION CODE	TYPE	POST CROSS SECTION K	POST LENGTH L	FITS MIN. HOLE SIZE	EXAMPLE PART NUMBER
R	H	Dip Solder	.026 [0.66] Round	.190 [4.83]	.030 [0.76]	<i>MPSL-0125-10-DR-1HK</i>
R	H(.165)	Dip Solder	.026 [0.66] Round	.165 [4.19]	.030 [0.76]	<i>MPSL-0125-10-DR-1HK(.165)</i>
W	H	Dip Solder	.025 [0.64] Square	.190 [4.83]	.040 [1.02]	<i>MPSL-0125-10-DW-1HK</i>
W	OMIT	Wire Wrap	.025 [0.64] Square	.560 [14.20]	.040 [1.02]	<i>MPSL-0125-10-DW-1K</i>

MOUNTING STYLE



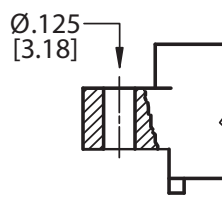
(STYLE 1)



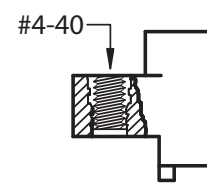
(STYLE 2)



(STYLE 4)



(STYLE 5)



(STYLE 6)



PART NUMBER CODING

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate

PLATING MODIFICATION CODE**
K = Required on MP SL or MPL Plating
Omit for MP Plating (Overall Gold)

MODIFICATION CODE**
(See Opposite Page)
H = Dip Solder .190[4.83] Tail Length
(.026 Round or .025 Square)
H(.165) = Dip Solder .165[4.19] Tail Length
(.026 Round Only)

INSULATOR MATERIAL**
0 = PBT

CONTACT CENTERS
125 = .125" [3.18mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

READOUT
D = Dual

TERMINATION TYPE (See Opposite Page)
LOOP BELLOWS
R = .026[.66mm] Round
W = .025[.64mm] Square

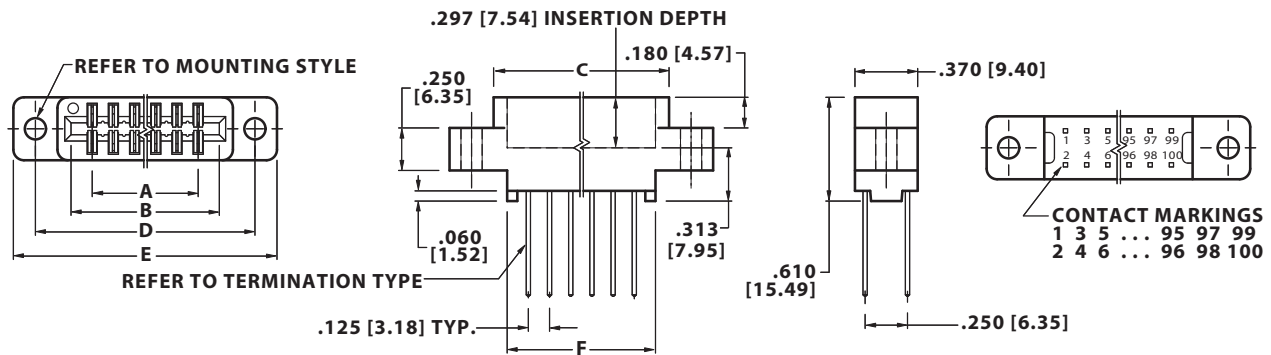
PLATING - RoHS Compliant
Contact Surface **Termination**
*MPSL = .000010" Gold .000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold
*Requires 'K' Modification Code

MPSL - 0 125 - 10 - D W - 1 H K

**** SEE PAGES 96-97 FOR SPECIFICATIONS AND OTHER VARIATIONS**

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



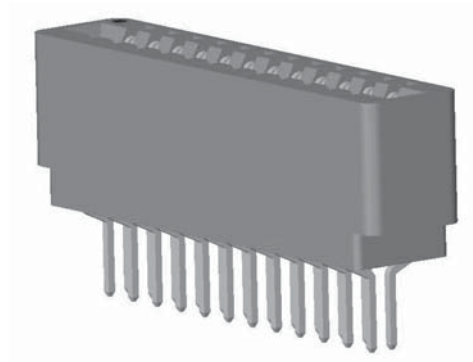
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.625	0.875	1.035	1.295	1.555	0.875	15.88	22.23	26.29	32.89	39.50	22.23
10/20	1.125	1.375	1.535	1.795	2.055	1.375	28.58	34.93	38.99	45.59	52.20	34.93
14/28	1.625	1.875	2.035	2.295	2.555	1.875	41.28	47.63	51.69	58.29	64.90	47.63
15/30	1.750	2.000	2.160	2.420	2.680	2.000	44.45	50.80	54.86	61.47	68.07	50.80
18/36	2.125	2.375	2.535	2.795	3.055	2.375	53.98	60.33	64.39	70.99	77.60	60.33
22/44	2.625	2.875	3.035	3.295	3.555	2.875	66.68	73.03	77.09	83.69	90.30	73.03
24/48	2.875	3.125	3.285	3.545	3.805	3.125	73.03	79.38	83.44	90.04	96.65	79.38
28/56	3.375	3.625	3.785	4.045	4.305	3.625	85.73	92.08	96.14	102.74	109.35	92.08
30/60	3.625	3.875	4.035	4.295	4.555	3.875	92.08	98.43	102.49	109.09	115.70	98.43
31/62	3.750	4.000	4.160	4.420	4.680	4.000	95.25	101.60	105.66	112.27	118.87	101.60
32/64	3.875	4.125	4.285	4.545	4.805	4.125	98.43	104.78	108.84	115.44	122.05	104.78
35/70	4.250	4.500	4.660	4.920	5.180	4.500	107.95	114.30	118.36	124.97	131.57	114.30
36/72	4.375	4.625	4.785	5.045	5.305	4.625	111.13	117.48	121.54	128.14	134.75	117.48
40/80	4.875	5.125	5.285	5.545	5.805	5.125	123.83	130.18	134.24	140.84	147.45	130.18
43/86	5.250	5.500	5.660	5.920	6.180	5.500	133.35	139.70	143.76	150.37	156.97	139.70
44/88	5.375	5.625	5.785	6.045	6.305	5.625	136.53	142.88	146.94	153.54	160.15	142.88
49/98	6.000	6.250	6.410	6.670	6.930	6.250	152.40	158.75	162.81	169.42	176.02	158.75
50/100	6.125	6.375	6.535	6.795	7.055	6.375	155.58	161.93	165.99	172.59	179.20	161.93



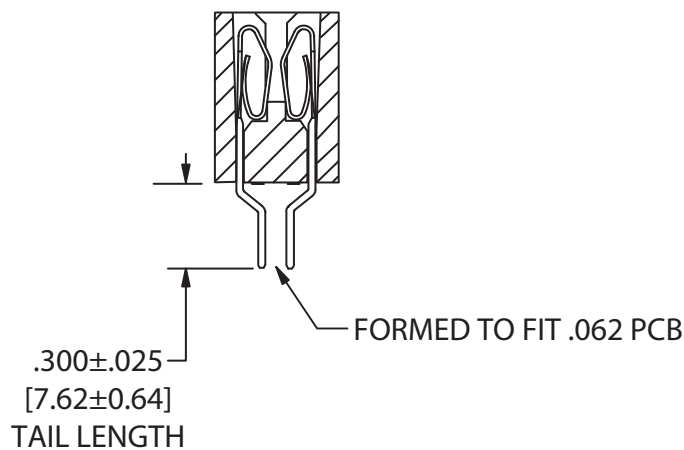
**.125" [3.18 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [.64 mm] Square Card Extender**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

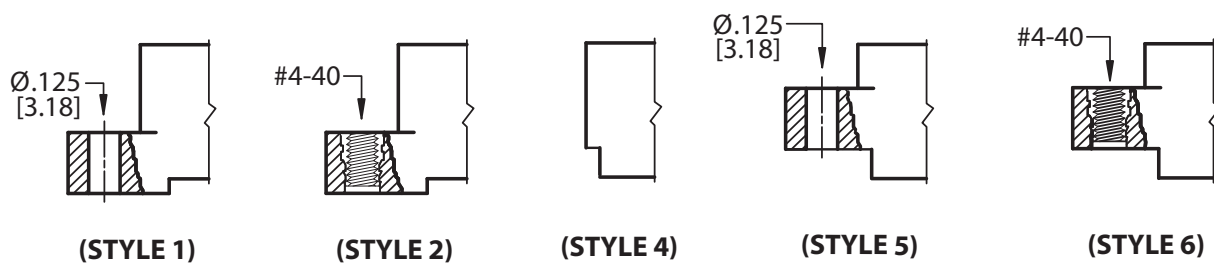


TERMINATION TYPE



Example P/N: *MPSL-0125-10-DWE-4KTT*

MOUNTING STYLE





**.125" [3.18 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [0.64 mm] Square Card Extender**

PART NUMBER CODING

MPSL - 0 125 - 10 - D WE - 4 K TT

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface Termination
*MPSL = .000010" Gold .000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold
*Requires 'K' Modification Code

INSULATOR MATERIAL**
0 = PBT

CONTACT CENTERS
125 = .125" [3.18mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

READOUT
D = Dual

MODIFICATION CODE**
TT = No Standoffs

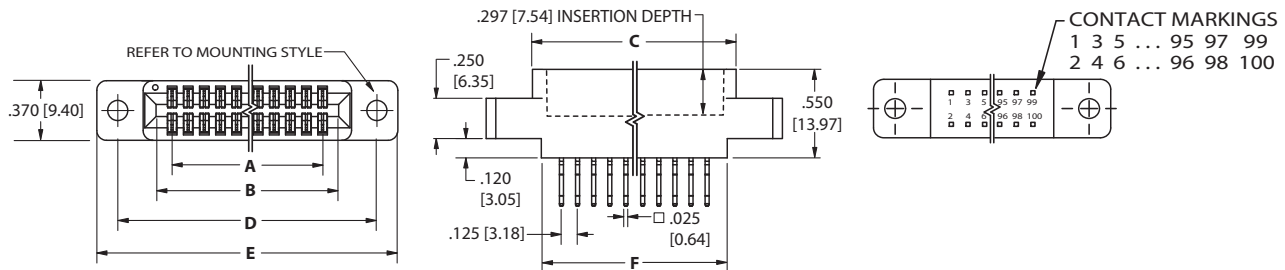
PLATING MODIFICATION CODE**
K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)
1 = .125" Clearance Hole
2 = #4-40 Threaded Insert
4 = No Mounting
5 = Raised, .125" Clearance Hole
6 = Raised, #4-40 Threaded Insert

TERMINATION TYPE (See Opposite Page)
WE = Card Extender

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



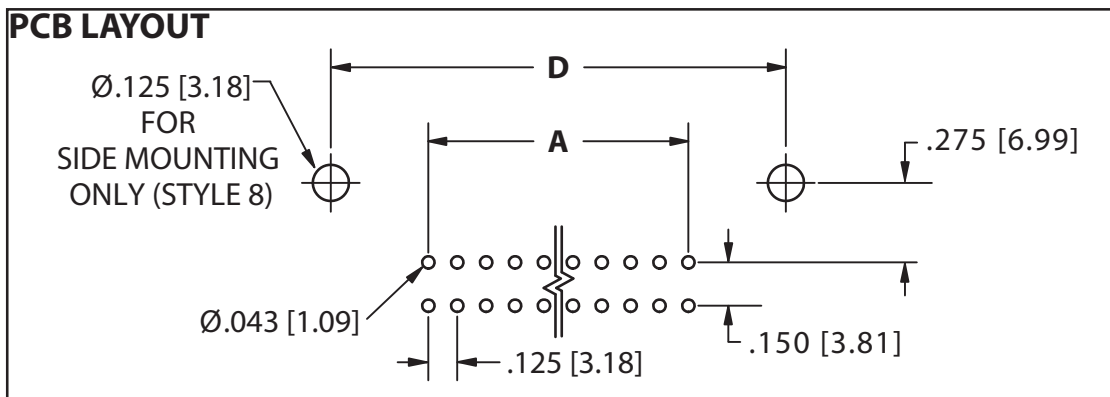
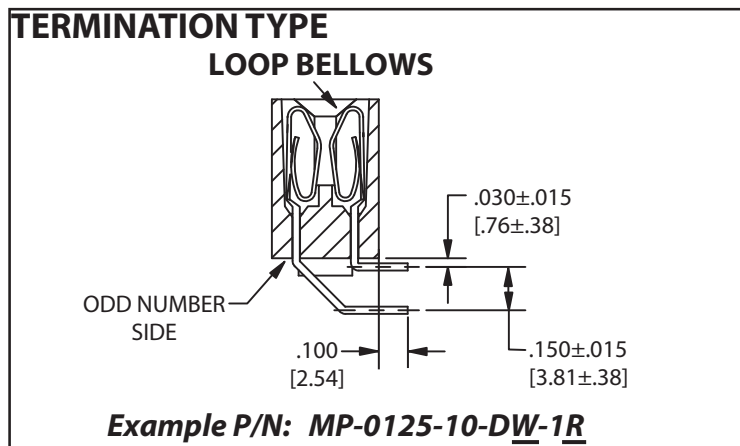
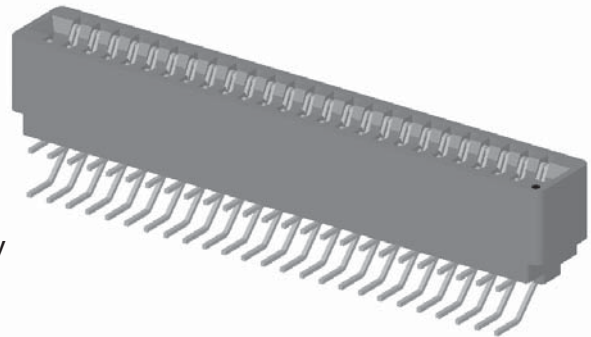
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.625	0.875	1.035	1.295	1.555	0.875	15.88	22.23	26.29	32.89	39.50	22.23
10/20	1.125	1.375	1.535	1.795	2.055	1.375	28.58	34.93	38.99	45.59	52.20	34.93
14/28	1.625	1.875	2.035	2.295	2.555	1.875	41.28	47.63	51.69	58.29	64.90	47.63
15/30	1.750	2.000	2.160	2.420	2.680	2.000	44.45	50.80	54.86	61.47	68.07	50.80
18/36	2.125	2.375	2.535	2.795	3.055	2.375	53.98	60.33	64.39	70.99	77.60	60.33
22/44	2.625	2.875	3.035	3.295	3.555	2.875	66.68	73.03	77.09	83.69	90.30	73.03
24/48	2.875	3.125	3.285	3.545	3.805	3.125	73.03	79.38	83.44	90.04	96.65	79.38
28/56	3.375	3.625	3.785	4.045	4.305	3.625	85.73	92.08	96.14	102.74	109.35	92.08
30/60	3.625	3.875	4.035	4.295	4.555	3.875	92.08	98.43	102.49	109.09	115.70	98.43
31/62	3.750	4.000	4.160	4.420	4.680	4.000	95.25	101.60	105.66	112.27	118.87	101.60
32/64	3.875	4.125	4.285	4.545	4.805	4.125	98.43	104.78	108.84	115.44	122.05	104.78
35/70	4.250	4.500	4.660	4.920	5.180	4.500	107.95	114.30	118.36	124.97	131.57	114.30
36/72	4.375	4.625	4.785	5.045	5.305	4.625	111.13	117.48	121.54	128.14	134.75	117.48
40/80	4.875	5.125	5.285	5.545	5.805	5.125	123.83	130.18	134.24	140.84	147.45	130.18
43/86	5.250	5.500	5.660	5.920	6.180	5.500	133.35	139.70	143.76	150.37	156.97	139.70
44/88	5.375	5.625	5.785	6.045	6.305	5.625	136.53	142.88	146.94	153.54	160.15	142.88
49/98	6.000	6.250	6.410	6.670	6.930	6.250	152.40	158.75	162.81	169.42	176.02	158.75
50/100	6.125	6.375	6.535	6.795	7.055	6.375	155.58	161.93	165.99	172.59	179.20	161.93



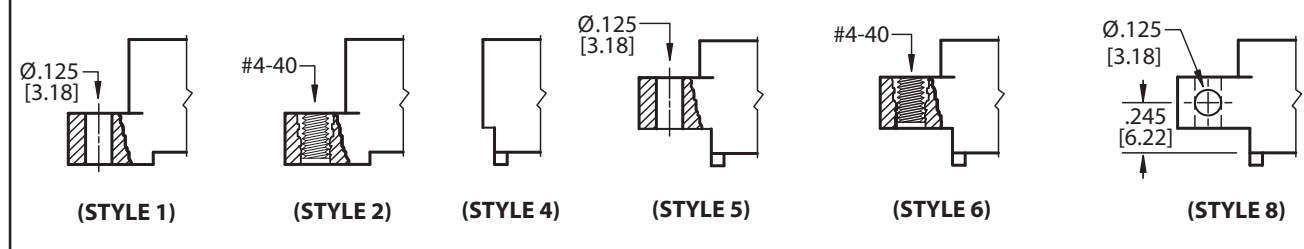
**.125" [3.18 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Right Angle**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



MOUNTING STYLE





PART NUMBER CODING

MPSL - 0 125 - 10 - D W - 1 K R

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate
Contact Surface **Termination**
*MPSL = .000010" Gold .000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold
***Requires 'K' Modification Code**

MODIFICATION CODE**
R = Right Angle

PLATING MODIFICATION CODE**
K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

INSULATOR MATERIAL**
0 = PBT

CONTACT CENTERS
125 = .125" [3018mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

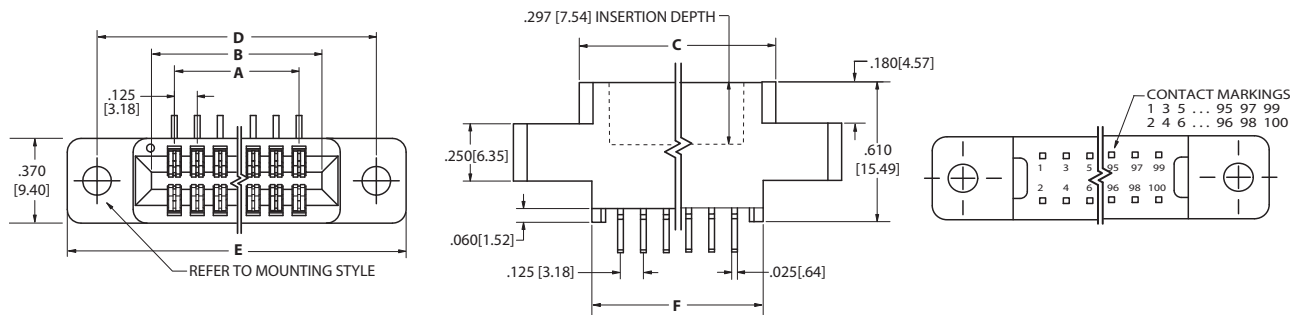
READOUT
D = Dual

MOUNTING STYLE (See Opposite Page)
1 = .125" Clearance Hole
2 = #4-40 Threaded Insert
4 = No Mounting
5 = Raised, .125" Clearance Hole
6 = Raised, #4-40 Threaded Insert
8 = Raised, Side Mounting, .125" Clearance Hole

TERMINATION TYPE (See Opposite Page)
LOOP BELLOWS
W = .025 [.64] Square

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



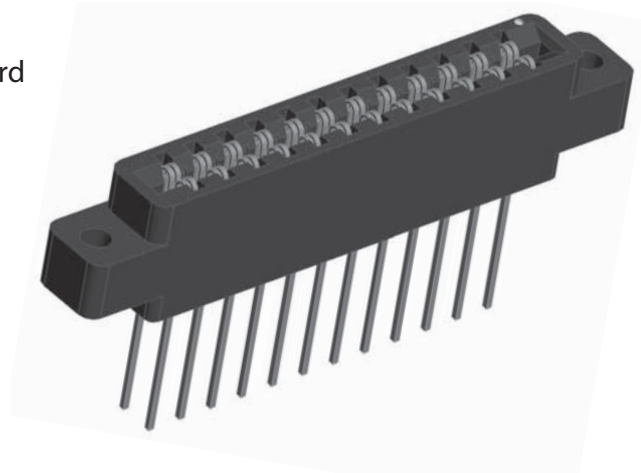
POSITIONS/ CONTACTS	INCHES						MILLIMETERS					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.625	0.875	1.035	1.295	1.555	0.875	15.88	22.23	26.29	32.89	39.50	22.23
10/20	1.125	1.375	1.535	1.795	2.055	1.375	28.58	34.93	38.99	45.59	52.20	34.93
14/28	1.625	1.875	2.035	2.295	2.555	1.875	41.28	47.63	51.69	58.29	64.90	47.63
15/30	1.750	2.000	2.160	2.420	2.680	2.000	44.45	50.80	54.86	61.47	68.07	50.80
18/36	2.125	2.375	2.535	2.795	3.055	2.375	53.98	60.33	64.39	70.99	77.60	60.33
22/44	2.625	2.875	3.035	3.295	3.555	2.875	66.68	73.03	77.09	83.69	90.30	73.03
24/48	2.875	3.125	3.285	3.545	3.805	3.125	73.03	79.38	83.44	90.04	96.65	79.38
28/56	3.375	3.625	3.785	4.045	4.305	3.625	85.73	92.08	96.14	102.74	109.35	92.08
30/60	3.625	3.875	4.035	4.295	4.555	3.875	92.08	98.43	102.49	109.09	115.70	98.43
31/62	3.750	4.000	4.160	4.420	4.680	4.000	95.25	101.60	105.66	112.27	118.87	101.60
32/64	3.875	4.125	4.285	4.545	4.805	4.125	98.43	104.78	108.84	115.44	122.05	104.78
35/70	4.250	4.500	4.660	4.920	5.180	4.500	107.95	114.30	118.36	124.97	131.57	114.30
36/72	4.375	4.625	4.785	5.045	5.305	4.625	111.13	117.48	121.54	128.14	134.75	117.48
40/80	4.875	5.125	5.285	5.545	5.805	5.125	123.83	130.18	134.24	140.84	147.45	130.18
43/86	5.250	5.500	5.660	5.920	6.180	5.500	133.35	139.70	143.76	150.37	156.97	139.70
44/88	5.375	5.625	5.785	6.045	6.305	5.625	136.53	142.88	146.94	153.54	160.15	142.88
49/98	6.000	6.250	6.410	6.670	6.930	6.250	152.40	158.75	162.81	169.42	176.02	158.75
50/100	6.125	6.375	6.535	6.795	7.055	6.375	155.58	161.93	165.99	172.59	179.20	161.93



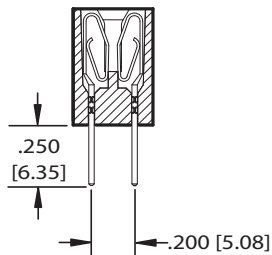
**.150" [3.81 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [.64 mm] Square & .026" [.66 mm] Round Dip Solder**

SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Pages 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

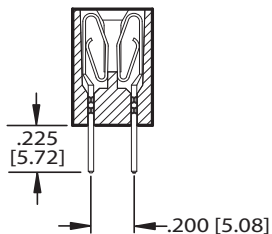


TERMINATION TYPE



.250 [6.35] TAIL LENGTH

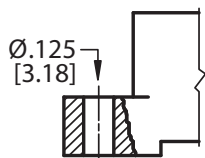
Termination Code	Modification Code	Termination Type	Fits Min. Hole Size	Example Part Number
W	H	.025[.64] Square	.040[1.02]	<i>MPSL-0150-18-DW-1HK</i>
R	H	.026[.66] Round	.030[0.76]	<i>MPSL-0150-18-DR-1HK</i>



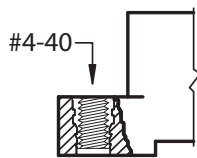
.225 [5.72] TAIL LENGTH

Termination Code	Modification Code	Termination Type	Fits Min. Hole Size	Example Part Number
R	H(.225)	.026[.66] Round	.030[0.76]	<i>MPSL-0150-18-DR-1HK(.225)</i>

MOUNTING STYLE



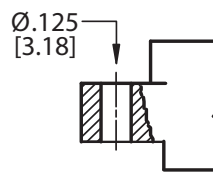
(STYLE 1)



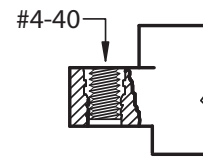
(STYLE 2)



(STYLE 4)



(STYLE 5)



(STYLE 6)



**.150" [3.81 mm] Contact Centers, .550" [13.90 mm] Insulator Height,
.025" [.64 mm] Square & .026" [.66 mm] Round Dip Solder**

PART NUMBER CODING

MPSL - 0 150 - 18 - D W - 1 H K

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickle Underplate

Contact Surface Termination

*MPSL = .000010" Gold .000100" Pure Tin Matte

*MPL = .000100" Overall Pure Tin, Matte

MP = .000010" Overall Gold

*** Requires 'K' Modification Code**

INSULATOR MATERIAL **
0 = PBT

CONTACT CENTERS
150 = .150" [3.81mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

READOUT
D = Dual

PLATING MODIFICATION CODE**
K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

MODIFICATION CODE**
(See Opposite Page)

H = Dip Solder .250[6.35] Tail Length
(.026 Round or .025 Square)

H(.225) = Dip Solder .225[5.72] Tail Length
(.026 Round Only)

MOUNTING STYLE (See Opposite Page)

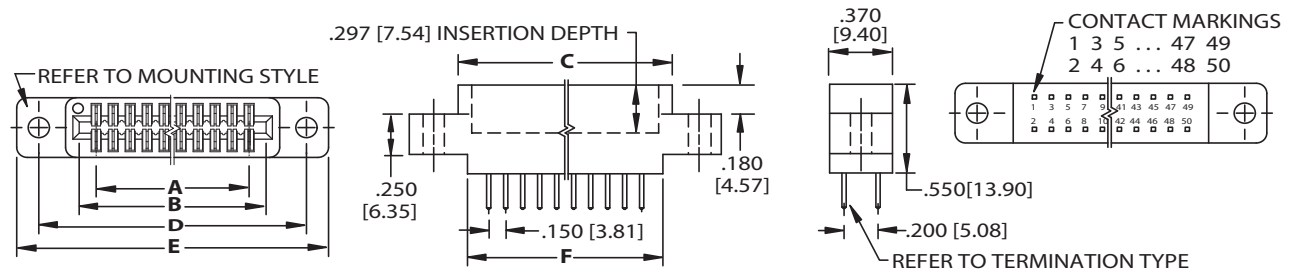
1 = .125" Clearance Hole
2 = #4-40 Threaded Insert
4 = No Mounting
5 = Raised, .125" Clearance Hole
6 = Raised, #4-40 Threaded Insert

TERMINATION TYPE (See Opposite Page)

LOOP BELLOWS
W = .025[.64mm] Square
R = .026[.66mm] Round

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



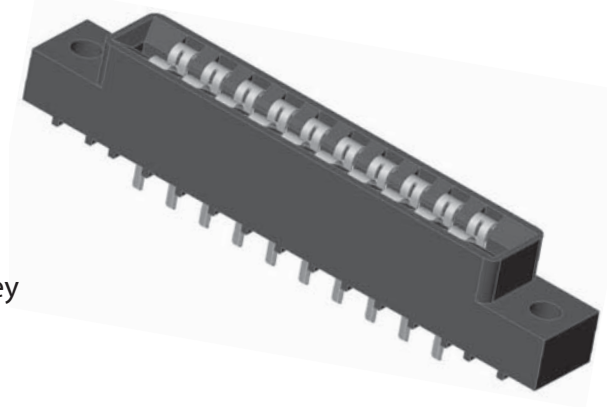
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.010	B±.010	C±.015	D±.015	E±.020	F±.015	A±0.25	B±0.25	C±0.38	D±0.38	E±0.51	F±0.20
18/36	2.550	2.850	2.990	3.300	3.550	2.800	64.77	72.39	75.95	83.82	90.17	71.12
25/50	3.600	3.900	4.040	-----	-----	3.850	91.44	99.06	102.62	-----	-----	97.79
26/52	3.750	4.050	4.190	4.500	4.750	4.000	95.25	102.87	106.43	114.30	120.65	101.60
28/56	4.050	4.350	4.490	4.800	5.050	4.300	102.87	110.49	114.05	121.92	128.27	109.22
32/64	4.650	4.950	5.090	-----	-----	4.900	118.11	125.73	129.29	-----	-----	124.46
50/100	7.350	7.650	7.800	-----	-----	7.600	186.69	194.31	198.12	-----	-----	193.04



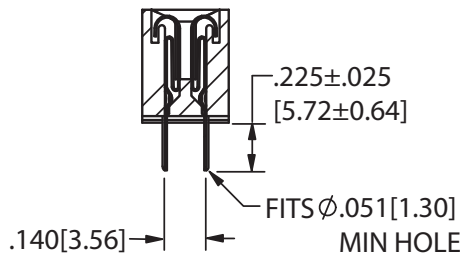
**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Dip Solder**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 ± 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- Row Spacing Available in $.140"$ or $.200"$
(Use Modification Code 'E9' or 'X9' for $.200"$)
- P/N 04-0003-000 for In Between Contact Position Key
P/N 04-0002-000 for In Contact Position Key
See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

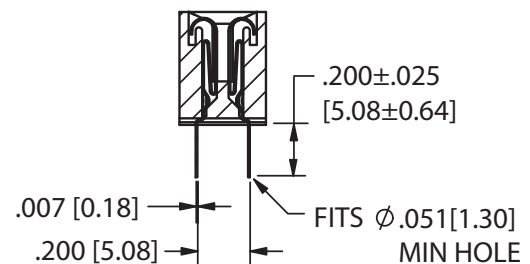


TERMINATION TYPE



**DIP SOLDER (S)
.140" ROW SPACING**

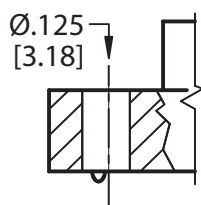
Example P/N: MP^{SL}-0156-10-DS-1K



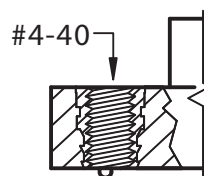
**DIP SOLDER (S)
.200" ROW SPACING
REQUIRES 'X9' MODIFICATION CODE**

Example P/N: MP^{SL}-0156-10-DS-1X9K

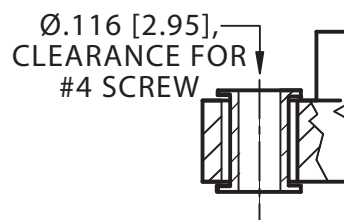
MOUNTING STYLE



(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)

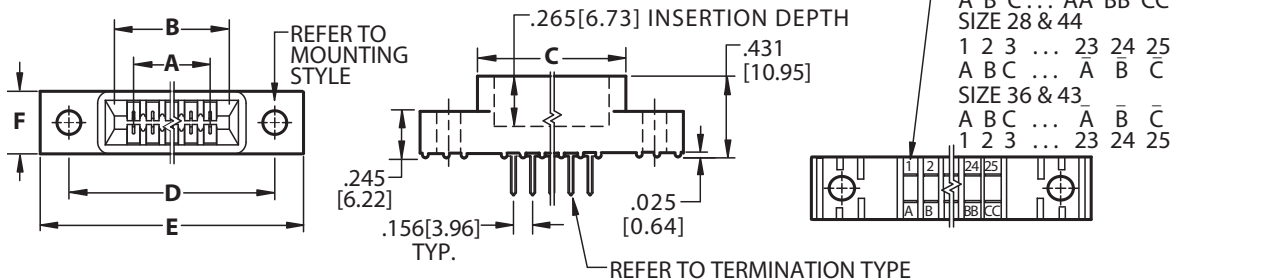


PART NUMBER CODING

PLATING - RoHS Compliant		MODIFICATION CODE**	
All Platings are Lead Free and have .000050" Nickel Underplate		K = Required on MPSSL or MPL Plating	
Contact Surface		Omit for MP Plating (Overall Gold)	
Termination		E9, X9 = .200" Row Spacing	
*MPSSL = .000010" Gold	.000100" Pure Tin, Matte	MOUNTING STYLE (See Opposite Page)	
*MPL = .000100" Overall Pure Tin, Matte		1 = .125" Clearance Hole	
MP = .000010" Overall Gold		2 = #4-40 Threaded Insert	
*Requires 'K' Modification Code		3 = Floating Bobbin	
INSULATOR MATERIAL**		4 = No Mounting	
0 = PBT		TERMINATION TYPE (See Opposite Page)	
CONTACT CENTERS		S = Dip Solder	
156 = .156" [3.96mm]		READOUT	
NUMBER OF POSITIONS		D = Dual	
Contacts Per Row (See Position Chart Below)			

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



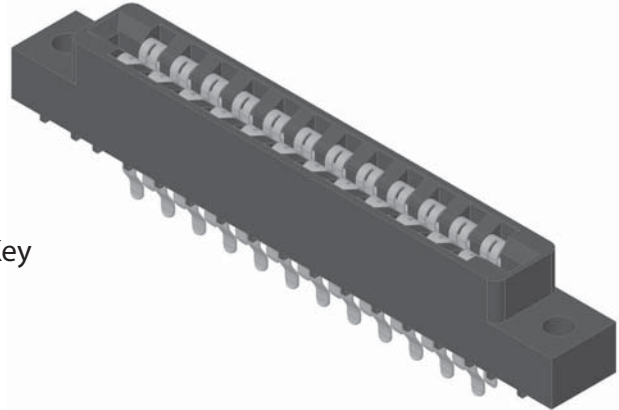
POSITIONS/ CONTACTS	INCHES					[MILLIMETERS]					F±0.13
	A±.008	B±.008	C±.015	D±.010	E MAX	A±0.20	B±0.20	C±0.38	D±0.25	E MAX	
02/04	0.156	0.476	0.596	'N' MOUNTING		3.96	12.09	15.14	'N' MOUNTING		8.26
03/06	0.312	0.632	0.752	'N' MOUNTING		7.92	16.05	19.10	'N' MOUNTING		
06/12	0.780	1.100	1.220	1.533	1.902	19.81	27.94	30.99	38.94	48.31	
08/16	1.092	1.412	1.532	1.845	2.214	27.74	35.86	38.91	46.86	56.24	
10/20	1.404	1.724	1.844	2.157	2.526	35.66	43.79	46.84	54.79	64.16	
11/22	1.560	1.880	2.000	2.313	2.682	39.62	47.75	50.80	58.75	68.12	
12/24	1.716	2.036	2.156	2.469	2.838	43.59	51.71	54.76	62.71	72.09	
15/30	2.184	2.504	2.624	2.937	3.306	55.47	63.60	66.65	74.60	83.97	
18/36	2.652	2.972	3.092	3.405	3.774	67.36	75.49	78.54	86.49	95.86	
22/44	3.276	3.596	3.716	4.029	4.398	83.21	91.34	94.39	102.34	111.71	
24/48	3.588	3.908	4.028	4.341	4.710	91.14	99.26	102.31	110.26	119.63	11.13
25/50	3.744	4.064	4.184	4.497	4.866	95.10	103.23	106.27	114.22	123.60	
28/56	4.212	4.532	4.652	4.965	5.334	106.98	115.11	118.16	126.11	135.48	
36/72	5.460	5.780	5.900	6.213	6.582	138.68	146.81	149.86	157.81	167.18	
43/86	6.552	6.872	6.992	7.305	7.674	166.42	174.55	177.60	185.55	194.92	12.70
44/88	6.708	7.028	7.148	7.461	7.830	170.38	178.51	181.56	189.51	198.88	



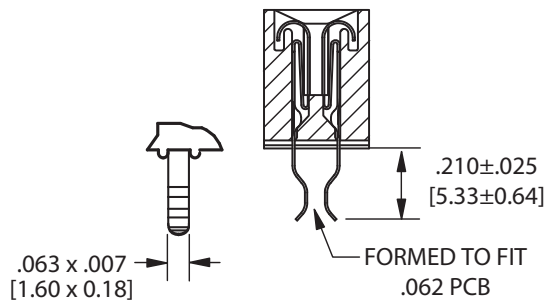
**.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height,
Card Extender**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0003-000 for In Between Contact Position Key
P/N 04-0002-000 for In Contact Position Key
See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

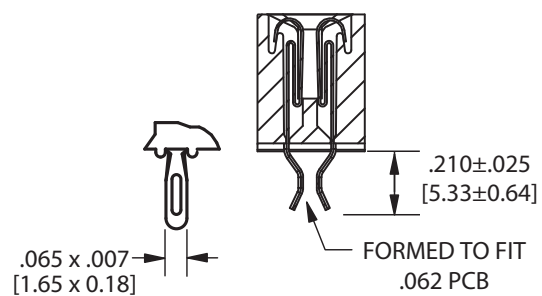


TERMINATION TYPE



CARD EXTENDER (SE)

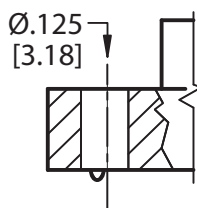
Example P/N: MPSL-0156-10-DSE-1K



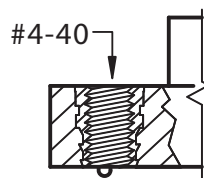
**ECONOMY EYELET
CARD EXTENDER (PE)**

Example P/N: EMPL-0156-10-DPE-1K

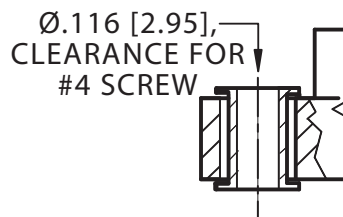
MOUNTING STYLE



(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)



PART NUMBER CODING

MPSL - 0 156 - 10 - D SE - 1 K

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface Termination

*MPSL = .000010" Gold .000100" Pure Tin Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold

Platings that start with 'E' are for Economy Eyelet Only

*EMPSL = .000010" Gold .000100" Pure Tin Matte
*EMPL = .000100" Overall Pure Tin, Matte
EMP = .000010" Overall Gold

* Requires 'K' Modification Code

Other Plating and thicknesses available upon request

PLATING MODIFICATION CODE**

K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)

1 = .125" Clearance Hole
2 = #4-40 Threaded Insert
3 = Floating Bobbin
4 = No Mounting

TERMINATION TYPE (See Opposite Page)

SE = Card Extender
Requires Part Number to start with 'M'
PE = Economy Eyelet Card Extender
Requires Part Number to start with 'E'

INSULATOR MATERIAL**

0 = PBT

CONTACT CENTERS

156 = .156" [3.96mm]

NUMBER OF POSITIONS

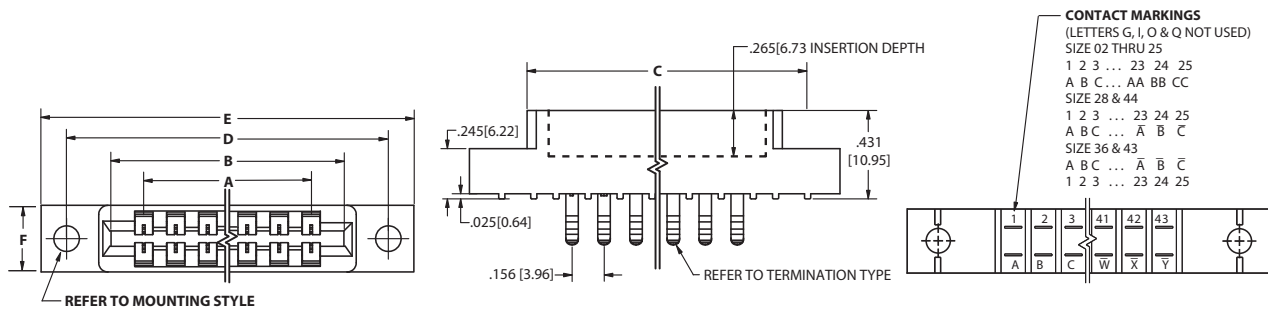
Contacts Per Row (See Position Chart Below)

READOUT

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



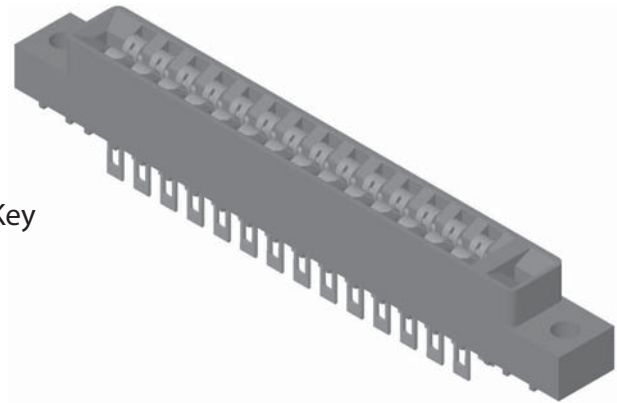
POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E MAX	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E MAX	F±0.13
02/04	0.156	0.476	0.596	'N' MOUNTING			3.96	12.09	15.14	'N' MOUNTING		
03/06	0.312	0.632	0.752	'N' MOUNTING			7.92	16.05	19.10	'N' MOUNTING		
06/12	0.780	1.100	1.220	1.533	1.902		19.81	27.94	30.99	38.94	48.31	
08/16	1.092	1.412	1.532	1.845	2.214		27.74	35.86	38.91	46.86	56.24	
10/20	1.404	1.724	1.844	2.157	2.526		35.66	43.79	46.84	54.79	64.16	
11/22	1.560	1.880	2.000	2.313	2.682		39.62	47.75	50.80	58.75	68.12	
12/24	1.716	2.036	2.156	2.469	2.838		43.59	51.71	54.76	62.71	72.09	
15/30	2.184	2.504	2.624	2.937	3.306		55.47	63.60	66.65	74.60	83.97	
18/36	2.652	2.972	3.092	3.405	3.774		67.36	75.49	78.54	86.49	95.86	
22/44	3.276	3.596	3.716	4.029	4.398		83.21	91.34	94.39	102.34	111.71	
24/48	3.588	3.908	4.028	4.341	4.710		91.14	99.26	102.31	110.26	119.63	
25/50	3.744	4.064	4.184	4.497	4.866		95.10	103.23	106.27	114.22	123.60	
28/56	4.212	4.532	4.652	4.965	5.334		106.98	115.11	118.16	126.11	135.48	
36/72	5.460	5.780	5.900	6.213	6.582		138.68	146.81	149.86	157.81	167.18	
43/86	6.552	6.872	6.992	7.305	7.674		166.42	174.55	177.60	185.55	194.92	
44/88	6.708	7.028	7.148	7.461	7.830		170.38	178.51	181.56	189.51	198.88	



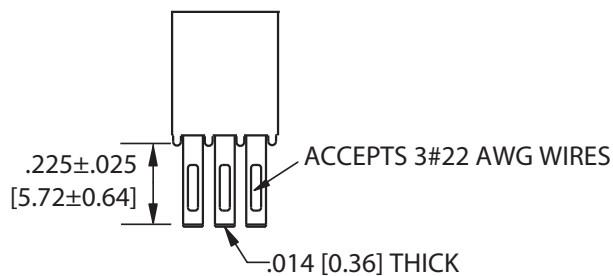
.156" [3.96 mm] Contact Centers, .431" [10.95 mm] Insulator Height, Eyelet

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 ± 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0003-000 for In Between Contact Position Key
P/N 04-0002-000 for In Contact Position Key
See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

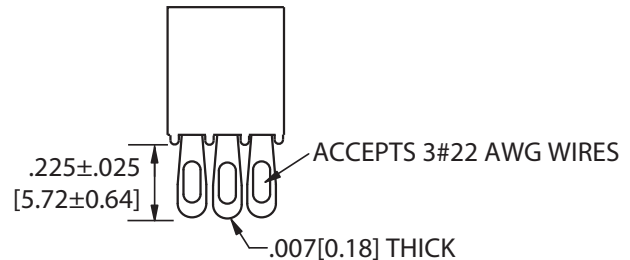


TERMINATION TYPE



EYELET (P)

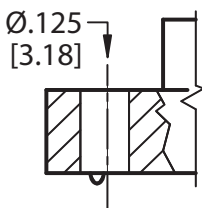
Example P/N: MP-0156-10-DP-1



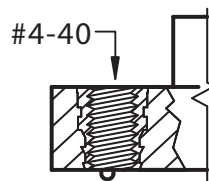
ECONOMY EYELET (P)

Example P/N: EMPSL-0156-10-DP-1K

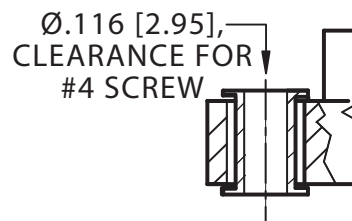
MOUNTING STYLE



(STYLE 1)



(STYLE 2)



(STYLE 3)



(STYLE 4)



PART NUMBER CODING

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface Termination

*MPL = .000100" Overall Pure Tin, Matte

MP = .000010" Overall Gold

Platings that start with 'E' are for Economy Eyelet Only

*EMPSL = .000010" Gold .000100" Pure Tin Matte

*EMPL = .000100" Overall Pure Tin, Matte

EMP = .000010" Overall Gold

*** Requires 'K' Modification Code**

Other Plating and thicknesses available upon request

INSULATOR MATERIAL**

O = PBT

CONTACT CENTERS

156 = .156" [3.96mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

MPL - 0 156 - 10 - D P - 1 K

PLATING MODIFICATION CODE**

K = Required on Tin Plating Terminations
Omit for MP and EMP Plating (Overall Gold)

MOUNTING STYLE (See Opposite Page)

- 1 = .125" Clearance Hole
- 2 = #4-40 Threaded Insert
- 3 = Floating Bobbin
- 4 = No Mounting

TERMINATION TYPE (See Opposite Page)

P = Pierced Eyelet, .014" Thick

MPL and MP Plating Only

P = Economy Eyelet, .007" Thick

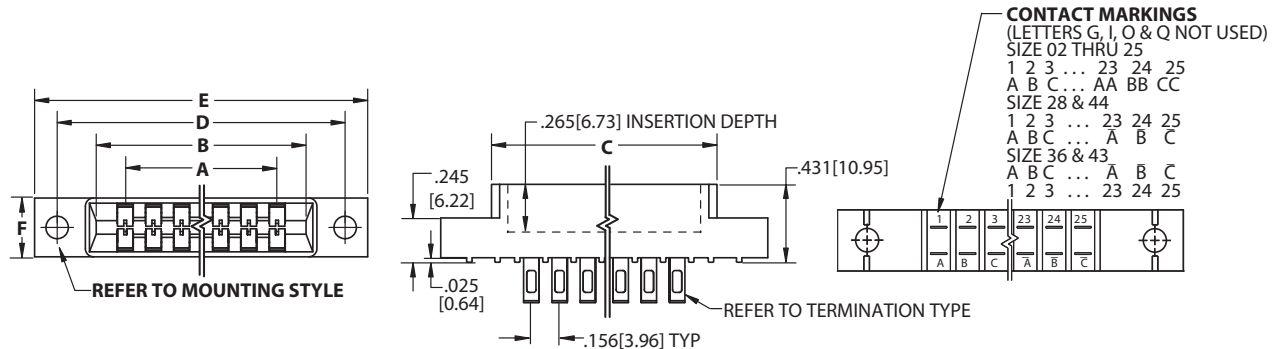
Requires Part Number to start with 'E'

READOUT

D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



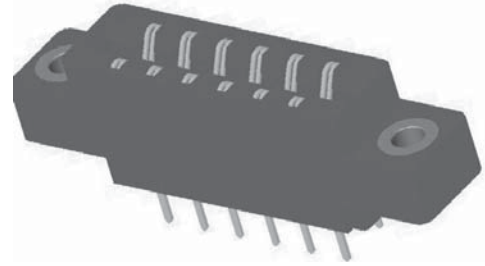
POSITIONS/ CONTACTS	INCHES					[MILLIMETERS]						
	A±.008	B±.008	C±.015	D±.010	E MAX	F±.005	A±0.20	B±0.20	C±0.38	D±0.25	E MAX	F±0.13
02/04	0.156	0.476	0.596	'N' MOUNTING			3.96	12.09	15.14	'N' MOUNTING		
03/06	0.312	0.632	0.752	'N' MOUNTING			7.92	16.05	19.10	'N' MOUNTING		
06/12	0.780	1.100	1.220	1.533	1.902		19.81	27.94	30.99	38.94	48.31	
08/16	1.092	1.412	1.532	1.845	2.214		27.74	35.86	38.91	46.86	56.24	
10/20	1.404	1.724	1.844	2.157	2.526		35.66	43.79	46.84	54.79	64.16	
11/22	1.560	1.880	2.000	2.313	2.682	0.325	39.62	47.75	50.80	58.75	68.12	
12/24	1.716	2.036	2.156	2.469	2.838		43.59	51.71	54.76	62.71	72.09	8.26
15/30	2.184	2.504	2.624	2.937	3.306		55.47	63.60	66.65	74.60	83.97	
18/36	2.652	2.972	3.092	3.405	3.774		67.36	75.49	78.54	86.49	95.86	
22/44	3.276	3.596	3.716	4.029	4.398		83.21	91.34	94.39	102.34	111.71	
24/48	3.588	3.908	4.028	4.341	4.710		91.14	99.26	102.31	110.26	119.63	
25/50	3.744	4.064	4.184	4.497	4.866		95.10	103.23	106.27	114.22	123.60	
28/56	4.212	4.532	4.652	4.965	5.334	0.438	106.98	115.11	118.16	126.11	135.48	11.13
36/72	5.460	5.780	5.900	6.213	6.582		138.68	146.81	149.86	157.81	167.18	
43/86	6.552	6.872	6.992	7.305	7.674	0.500	166.42	174.55	177.60	185.55	194.92	12.70
44/88	6.708	7.028	7.148	7.461	7.830		170.38	178.51	181.56	189.51	198.88	



**.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Wire Wrap & Dip Solder**

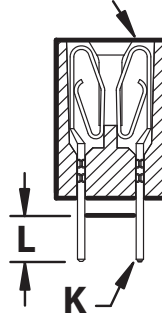
SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



TERMINATION TYPE

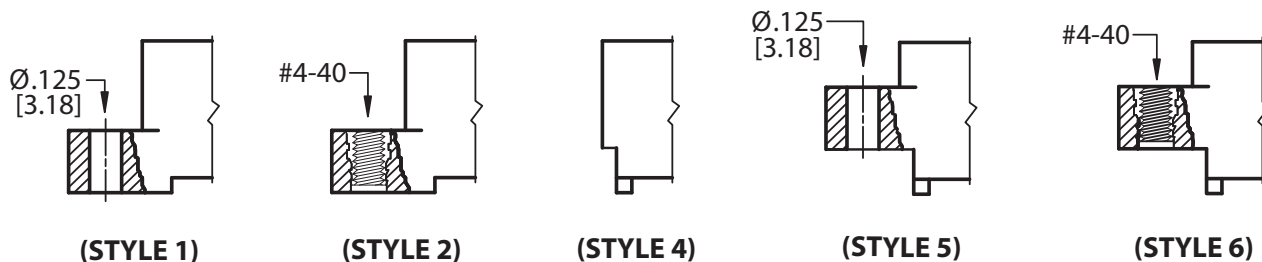
LOOP BELLOWS



LOOP BELLOWS

TERMINATION CODE	MODIFICATION CODE	TYPE	POST CROSS SECTION K	POST LENGTH L	FITS MIN. HOLE SIZE	EXAMPLE PART NUMBER
R	H	Dip Solder	.026 [0.66] Round	.190 [4.83]	.030 [0.76]	<i>MPSL-0156-10-DR-1HK</i>
R	H(.165)	Dip Solder	.026 [0.66] Round	.165 [4.19]	.030 [0.76]	<i>MPSL-0156-10-DR-1HK(.165)</i>
W	H	Dip Solder	.025 [0.64] Square	.190 [4.83]	.040 [1.02]	<i>MPSL-0156-10-DW-1HK</i>
W	OMIT	Wire Wrap	.025 [0.64] Square	.560 [14.20]	.040 [1.02]	<i>MPSL-0156-10-DW-1K</i>

MOUNTING STYLE





PART NUMBER CODING

PLATING - RoHS Compliant

All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface **Termination**
*MPSL = .000010" Gold .000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte
MP = .000010" Overall Gold

*Requires 'K' Modification Code

INSULATOR MATERIAL**

0 = PBT

CONTACT CENTERS

156 = .156" [3.96mm]

NUMBER OF POSITIONS

Contacts Per Row (See Position Chart Below)

READOUT

D = Dual

MPSL - 0 156 - 10 - D W - 1 H K

PLATING MODIFICATION CODE**

K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

MODIFICATION CODE**

(See Opposite Page)

H = Dip Solder .190[4.83] Tail Length
(.026 Round or .025 Square)

H(.165) = Dip Solder .165[4.19] Tail Length
(.026 Round Only)

MOUNTING STYLE (See Opposite Page)

1 = .125" Clearance Hole
2 = #4-40 Threaded Insert
4 = No Mounting
5 = Raised, .125" Clearance Hole
6 = Raised, #4-40 Threaded Insert

TERMINATION TYPE (See Opposite Page)

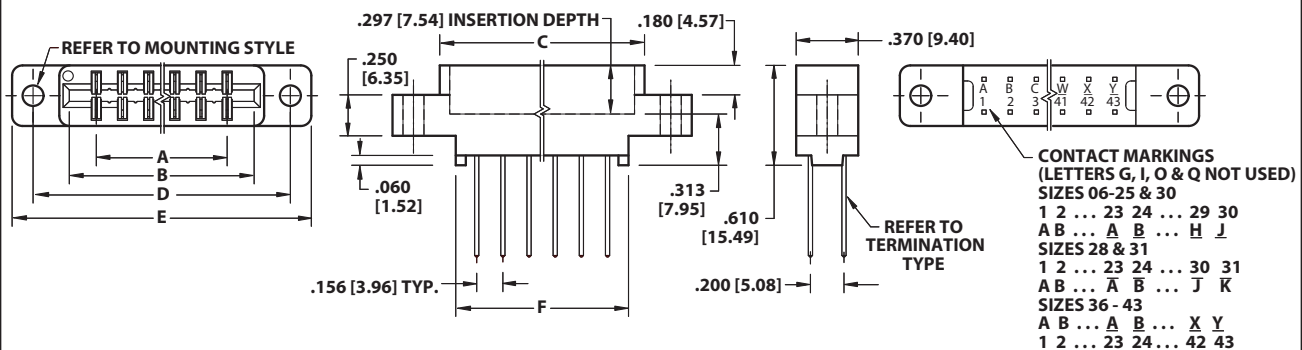
LOOP BELLOWS

R = .026[.66mm] Round

W = .025[.64mm] Square

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.780	1.102	1.221	1.534	1.784	1.030	19.81	27.99	31.01	38.96	45.31	26.16
08/16	1.092	1.414	1.533	1.846	2.096	1.342	27.74	35.92	38.94	46.89	53.24	34.09
10/20	1.404	1.726	1.845	2.158	2.408	1.654	35.66	43.84	46.86	54.81	61.16	42.01
12/24	1.716	2.038	2.157	2.470	2.720	1.966	43.59	51.77	54.79	62.74	69.09	49.94
15/30	2.184	2.506	2.625	2.938	3.188	2.434	55.47	63.65	66.68	74.63	80.98	61.82
18/36	2.652	2.974	3.093	3.406	3.656	2.902	67.36	75.54	78.56	86.51	92.86	73.71
20/40*	2.964	3.286	3.405	3.718	3.968	3.214	75.29	83.46	86.49	94.44	100.79	81.64
22/44	3.276	3.598	3.717	4.030	4.280	3.526	83.21	91.39	94.41	102.36	108.71	89.56
24/48	3.588	3.910	4.029	4.342	4.592	3.838	91.14	99.31	102.34	110.29	116.64	97.49
25/50	3.744	4.066	4.185	4.498	4.748	3.994	95.10	103.28	106.30	114.25	120.60	101.45
28/56	4.212	4.534	4.653	4.966	5.216	4.462	106.98	115.16	118.19	126.14	132.49	113.33
30/60	4.524	4.846	4.965	5.278	5.528	4.774	114.91	123.09	126.11	134.06	140.41	121.26
31/62	4.680	5.002	5.121	5.434	5.684	4.930	118.87	127.05	130.07	138.02	144.37	125.22
36/72	5.460	5.782	5.901	6.214	6.464	5.710	138.68	146.86	149.89	157.84	164.19	145.03
40/80	6.084	6.406	6.525	6.838	7.088	6.334	154.53	162.71	165.74	173.69	180.04	160.88
43/86	6.552	6.874	6.993	7.306	7.556	6.802	166.42	174.60	177.62	185.57	191.92	172.77

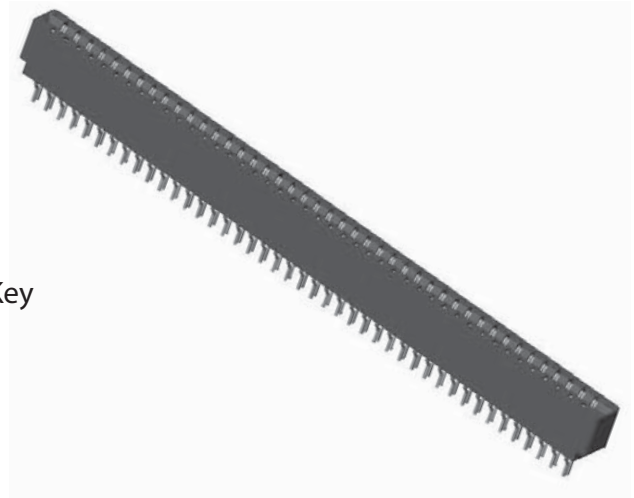
* Consult Factory for availability.



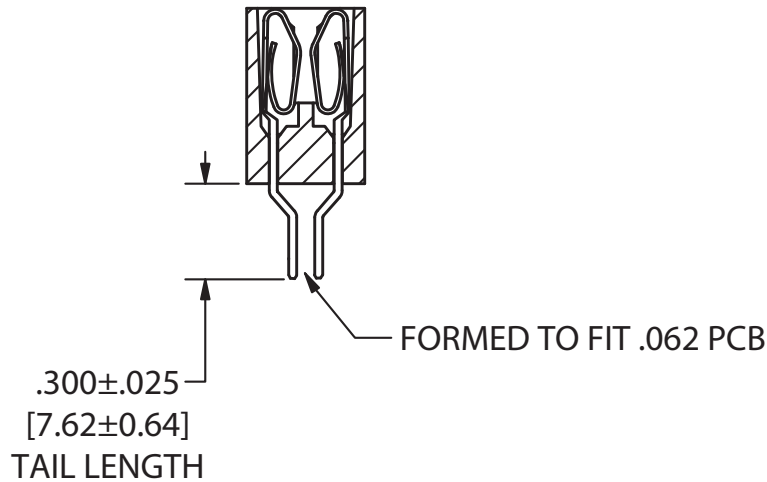
**.156" [3.96 mm] Contact Centers, .550" [13.97 mm] Insulator Height,
.025" [.64 mm] Square Card Extender**

SPECIFICATIONS

- Accommodates $.062" \pm .008"$ [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory

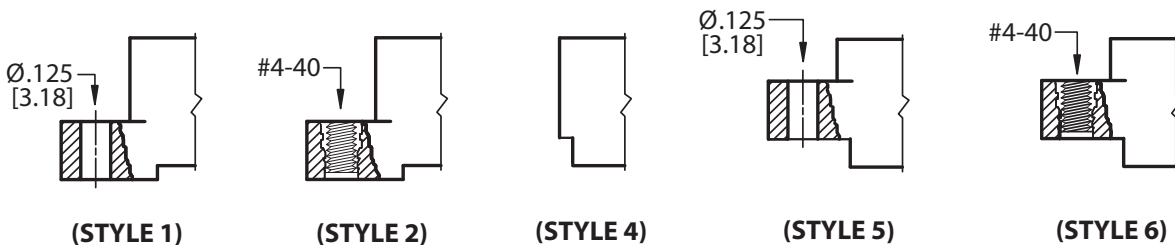


TERMINATION TYPE



Example P/N: MP~~SL~~-0156-10-DWE-4KT~~T~~

MOUNTING STYLE



**.156" [3.96 mm] Contact Centers, .550" [13.97 mm] Insulator Height,
.025" [.64 mm] Square Card Extender**

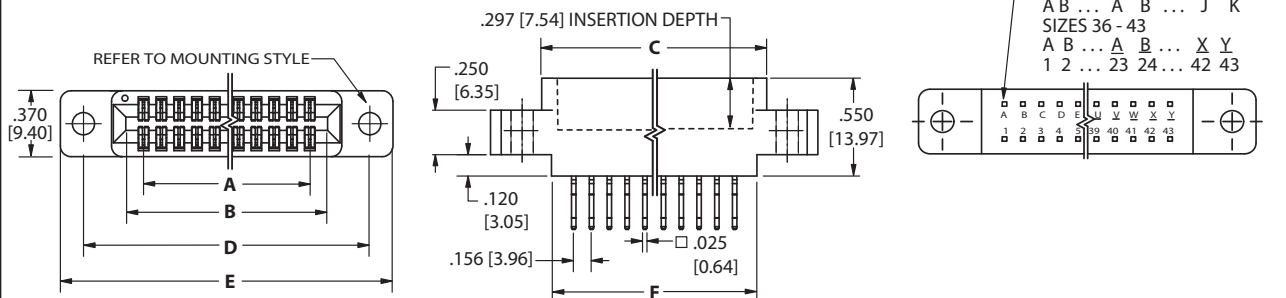


PART NUMBER CODING

PLATING - RoHS Compliant	MPSL - 0 156 - 10 - D WE - 4 K TT	MODIFICATION CODE** TT = No Standoffs
All Platings are Lead Free and have .000050" Nickel Underplate		
Contact Surface	Termination	PLATING MODIFICATION CODE**
*MPSL = .000010" Gold	.000100" Pure Tin, Matte	K = Required on MPSL or MPL Plating
*MPL = .000100" Overall Pure Tin, Matte		Omit for MP Plating (Overall Gold)
MP = .000010" Overall Gold		
*Requires 'K' Modification Code		MOUNTING STYLE (See Opposite Page)
		1 = .125" Clearance Hole
		2 = #4-40 Threaded Insert
		4 = No Mounting
		5 = Raised, .125" Clearance Hole
		6 = Raised, #4-40 Threaded Insert
INSULATOR MATERIAL**		TERMINATION TYPE (See Opposite Page)
0 = PBT		WE = Card Extender
CONTACT CENTERS		READOUT
156 = .156" [3.96mm]		D = Dual
NUMBER OF POSITIONS		
Contacts Per Row (See Position Chart Below)		

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.780	1.102	1.221	1.534	1.784	1.030	19.81	27.99	31.01	38.96	45.31	26.16
08/16	1.092	1.414	1.533	1.846	2.096	1.342	27.74	35.92	38.94	46.89	53.24	34.09
10/20	1.404	1.726	1.845	2.158	2.408	1.654	35.66	43.84	46.86	54.81	61.16	42.01
12/24	1.716	2.038	2.157	2.470	2.720	1.966	43.59	51.77	54.79	62.74	69.09	49.94
15/30	2.184	2.506	2.625	2.938	3.188	2.434	55.47	63.65	66.68	74.63	80.98	61.82
18/36	2.652	2.974	3.093	3.406	3.656	2.902	67.36	75.54	78.56	86.51	92.86	73.71
20/40*	2.964	3.286	3.405	3.718	3.968	3.214	75.29	83.46	86.49	94.44	100.79	81.64
22/44	3.276	3.598	3.717	4.030	4.280	3.526	83.21	91.39	94.41	102.36	108.71	89.56
24/48	3.588	3.910	4.029	4.342	4.592	3.838	91.14	99.31	102.34	110.29	116.64	97.49
25/50	3.744	4.066	4.185	4.498	4.748	3.994	95.10	103.28	106.30	114.25	120.60	101.45
28/56	4.212	4.534	4.653	4.966	5.216	4.462	106.98	115.16	118.19	126.14	132.49	113.33
30/60	4.524	4.846	4.965	5.278	5.528	4.774	114.91	123.09	126.11	134.06	140.41	121.26
31/62	4.680	5.002	5.121	5.434	5.684	4.930	118.87	127.05	130.07	138.02	144.37	125.22
36/72	5.460	5.782	5.901	6.214	6.464	5.710	138.68	146.86	149.89	157.84	164.19	145.03
40/80	6.084	6.406	6.525	6.838	7.088	6.334	154.53	162.71	165.74	173.69	180.04	160.88
43/86	6.552	6.874	6.993	7.306	7.556	6.802	166.42	174.60	177.62	185.57	191.92	172.77

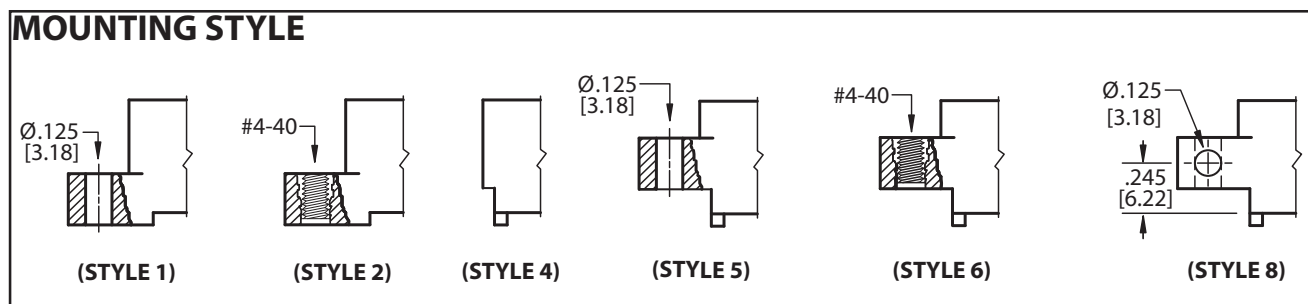
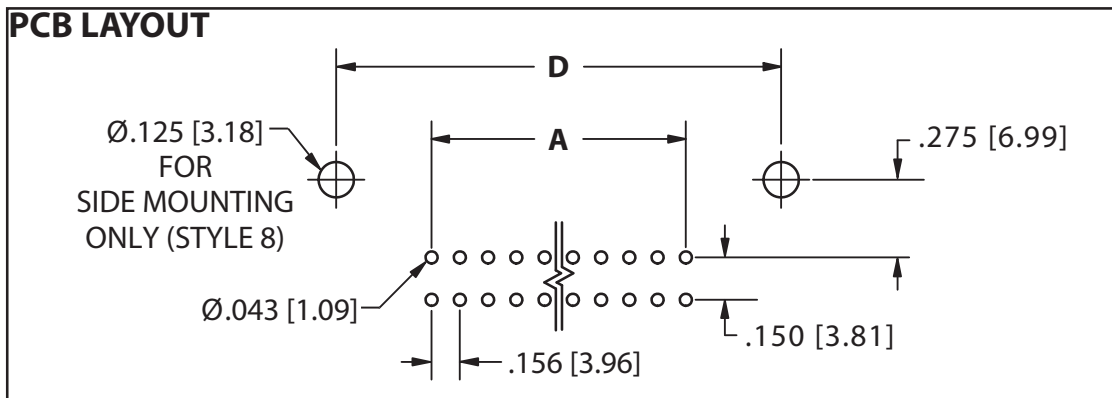
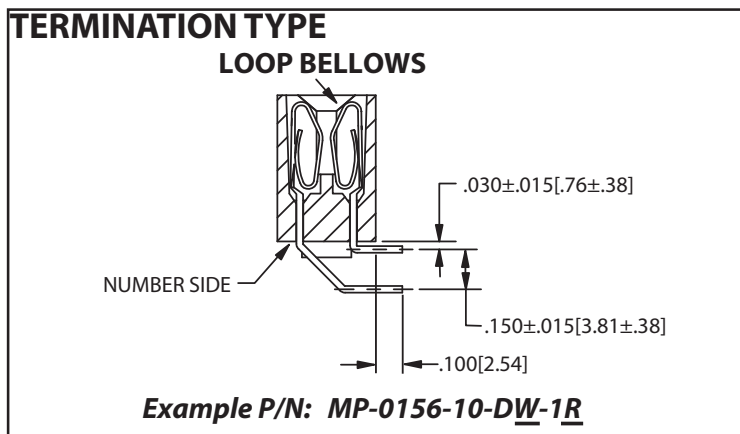
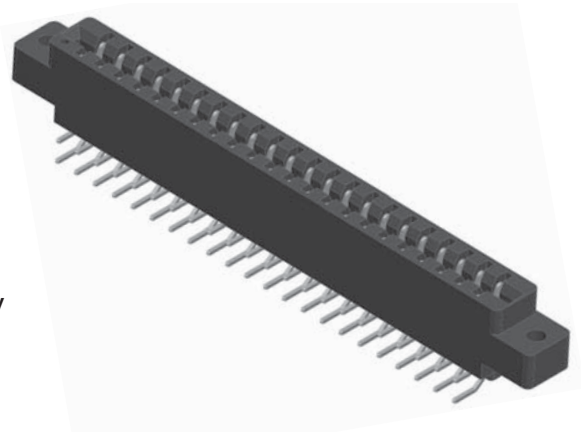
* Consult Factory for availability.



**.156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height,
Right Angle**

SPECIFICATIONS

- Accommodates $.062" \pm .008" [1.57 \pm 0.20]$ PC Board
- Insulator Material available in PBT, PPS or PA9T
- 3 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



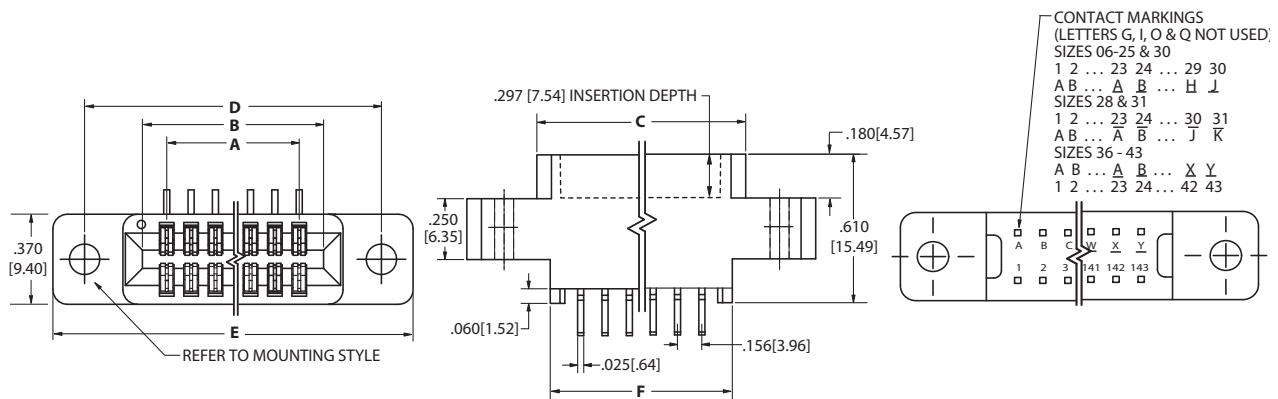


PART NUMBER CODING

PLATING - RoHS Compliant		MODIFICATION CODE**	
All Platings are Lead Free and have .000050" Nickel Underplate		R = Right Angle	
Contact Surface	Termination	PLATING MODIFICATION CODE**	
*MPSL = .000010" Gold	.000100" Pure Tin, Matte	K = Required on MPSL or MPL Plating	
*MPL = .000100" Overall Pure Tin, Matte		Omit for MP Plating (Overall Gold)	
MP = .000010" Overall Gold		MOUNTING STYLE (See Opposite Page)	
*Requires 'K' Modification Code		1 = .125" Clearance Hole	
INSULATOR MATERIAL **		2 = #4-40 Threaded Insert	
0 = PBT		4 = No Mounting	
CONTACT CENTERS		5 = Raised, .125" Clearance Hole	
156 = .156" [3.96mm]		6 = Raised, #4-40 Threaded Insert	
NUMBER OF POSITIONS		8 = Raised, Side Mounting, .125" Clearance Hole	
Contacts Per Row (See Position Chart Below)		TERMINATION TYPE	
READOUT		LOOP BELLOWS	
D = Dual		W = .025 [.64] Square	

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
06/12	0.780	1.102	1.221	1.534	1.784	1.030	19.81	27.99	31.01	38.96	45.31	26.16
08/16	1.092	1.414	1.533	1.846	2.096	1.342	27.74	35.92	38.94	46.89	53.24	34.09
10/20	1.404	1.726	1.845	2.158	2.408	1.654	35.66	43.84	46.86	54.81	61.16	42.01
12/24	1.716	2.038	2.157	2.470	2.720	1.966	43.59	51.77	54.79	62.74	69.09	49.94
15/30	2.184	2.506	2.625	2.938	3.188	2.434	55.47	63.65	66.68	74.63	80.98	61.82
18/36	2.652	2.974	3.093	3.406	3.656	2.902	67.36	75.54	78.56	86.51	92.86	73.71
20/40*	2.964	3.286	3.405	3.718	3.968	3.214	75.29	83.46	86.49	94.44	100.79	81.64
22/44	3.276	3.598	3.717	4.030	4.280	3.526	83.21	91.39	94.41	102.36	108.71	89.56
24/48	3.588	3.910	4.029	4.342	4.592	3.838	91.14	99.31	102.34	110.29	116.64	97.49
25/50	3.744	4.066	4.185	4.498	4.748	3.994	95.10	103.28	106.30	114.25	120.60	101.45
28/56	4.212	4.534	4.653	4.966	5.216	4.462	106.98	115.16	118.19	126.14	132.49	113.33
30/60	4.524	4.846	4.965	5.278	5.528	4.774	114.91	123.09	126.11	134.06	140.41	121.26
31/62	4.680	5.002	5.121	5.434	5.684	4.930	118.87	127.05	130.07	138.02	144.37	125.22
36/72	5.460	5.782	5.901	6.214	6.464	5.710	138.68	146.86	149.89	157.84	164.19	145.03
40/80	6.084	6.406	6.525	6.838	7.088	6.334	154.53	162.71	165.74	173.69	180.04	160.88
43/86	6.552	6.874	6.993	7.306	7.556	6.802	166.42	174.60	177.62	185.57	191.92	172.77

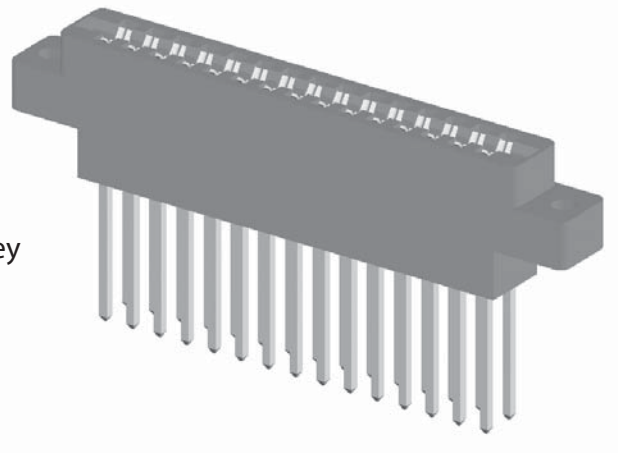
* Consult Factory for availability.



**.156" [3.96 mm] Contact Centers, .720" [18.29 mm] Insulator Height,
.045" [1.14 mm] Square Wire Wrap**

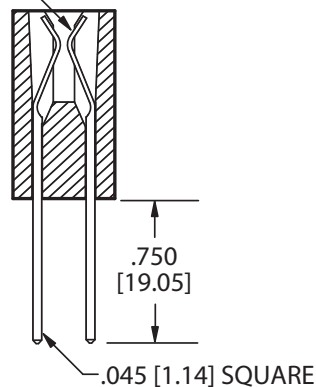
SPECIFICATIONS

- Accommodates .062" $\pm$.008" [1.57 $\pm$ 0.20] PC Board
- Insulator Material available in PBT
- 5 Amp Current Rating per contact
- Insulator / Contact Specifications and Part Number Coding See Page 98-99
- P/N 04-0004-000 for In Between Contact Position Key See Page 142 (Sold Separately)
- Molded-in Key Available - Consult Factory



TERMINATION TYPE

CANTILEVER CONTACT

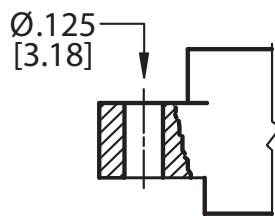


Example P/N: MPSL-0156-10-DFS-1K

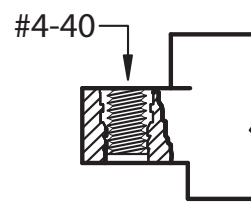
MOUNTING STYLE



(STYLE 4)



(STYLE 5)



(STYLE 6)



**.156" [3.96 mm] Contact Centers, .720" [18.29 mm] Insulator Height,
.045" [1.14 mm] Square Wire Wrap**

PART NUMBER CODING

MPSL - 0 156 - 10 - D FS - 4 K

PLATING - RoHS Compliant
All Platings are Lead Free and have .000050" Nickel Underplate

Contact Surface	Termination
*MPSL = .000010" Gold	.000100" Pure Tin, Matte
*MPL = .000100" Overall Pure Tin, Matte	
MP = .000010" Overall Gold	

***Requires 'K' Modification Code**

INSULATOR MATERIAL **
0 = PBT

CONTACT CENTERS
156 = .156" [3.96mm]

NUMBER OF POSITIONS
Contacts Per Row (See Position Chart Below)

MODIFICATION CODE**
PLATING MODIFICATION CODE**
K = Required on MPSL or MPL Plating
Omit for MP Plating (Overall Gold)

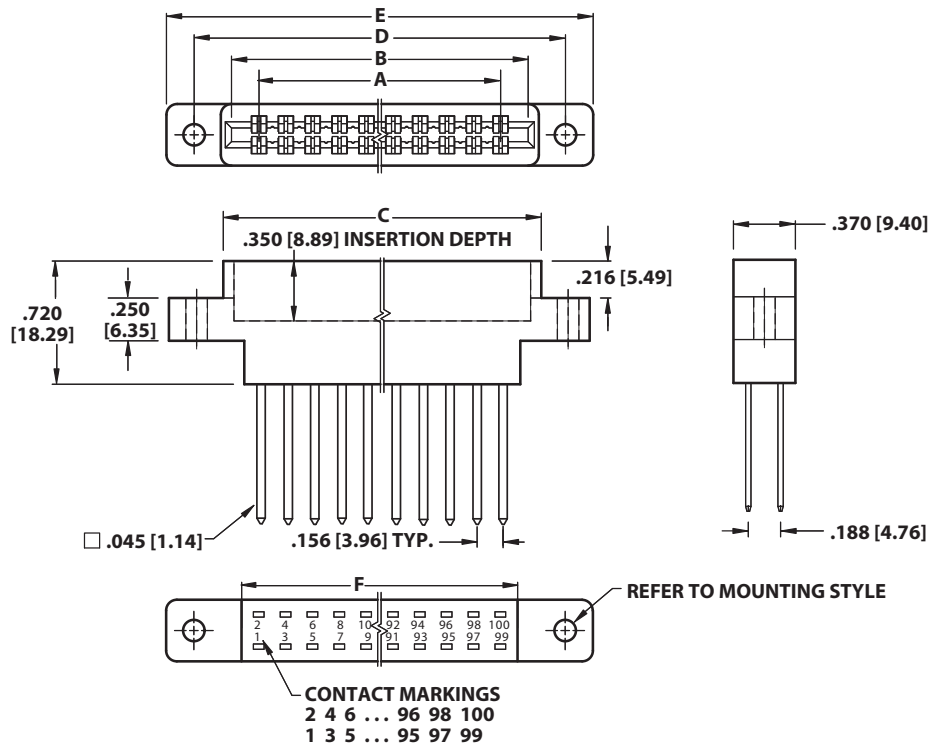
MOUNTING STYLE (See Opposite Page)
4 = No Mounting
5 = Raised, .125" Clearance Hole
6 = Raised, #4-40 Threaded Insert

TERMINATION TYPE (See Opposite Page)
FS = .045 Square Contacts

READOUT
D = Dual

DIMENSIONS

Dimensions in [] are in millimeters, all others are in inches.



POSITIONS/ CONTACTS	INCHES						[MILLIMETERS]					
	A±.008	B±.008	C±.015	D±.010	E±.020	F±.015	A±0.20	B±0.20	C±0.38	D±0.25	E±0.51	F±0.38
10/20	1.404	1.724	1.848	2.158	2.408	1.604	35.66	43.79	46.94	54.81	61.16	40.74
12/24	1.716	2.036	2.160	2.470	2.720	1.916	43.59	51.71	54.86	62.74	69.09	48.67
15/30	2.184	2.504	2.628	2.938	3.188	2.384	55.47	63.60	66.75	74.63	80.98	60.55
18/36	2.652	2.972	3.096	3.406	3.656	2.852	67.36	75.49	78.64	86.51	92.86	72.44
22/44	3.276	3.596	3.720	4.030	4.280	3.476	83.21	91.34	94.49	102.36	108.71	88.29
25/50	3.744	4.064	4.188	4.498	4.748	3.944	95.10	103.23	106.38	114.25	120.60	100.18
28/56	4.212	4.532	4.656	4.966	5.216	4.412	106.98	115.11	118.26	126.14	132.49	112.06
30/60	4.524	4.844	4.968	5.278	5.528	4.724	114.91	123.04	126.19	134.06	140.41	119.99
36/72	5.460	5.780	5.904	6.214	6.464	5.660	138.68	146.81	149.96	157.84	164.19	143.76
43/86	6.552	6.872	6.996	7.306	7.556	6.752	166.42	174.55	177.70	185.57	191.92	171.50

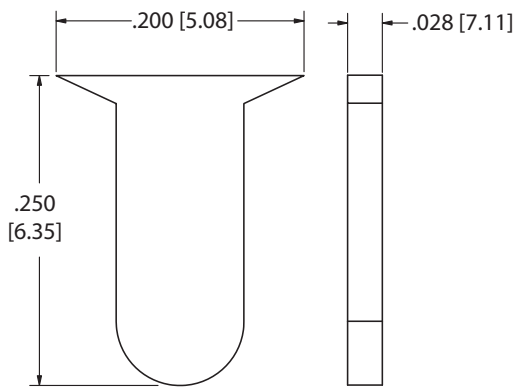
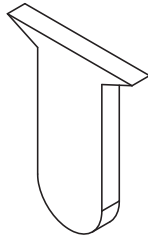


ALL KEYS ORDERED SEPARATELY

IN BETWEEN CONTACT KEY

P/N: 04-0001-000

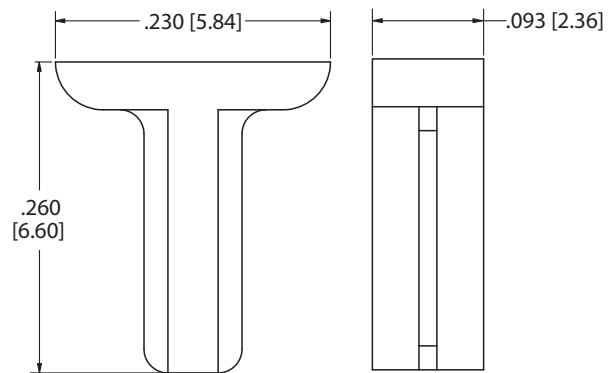
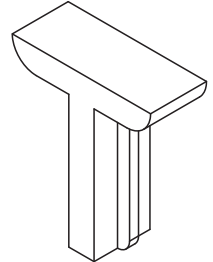
SULLINS PART: PLM-K1



IN CONTACT KEY

P/N: 04-0002-000

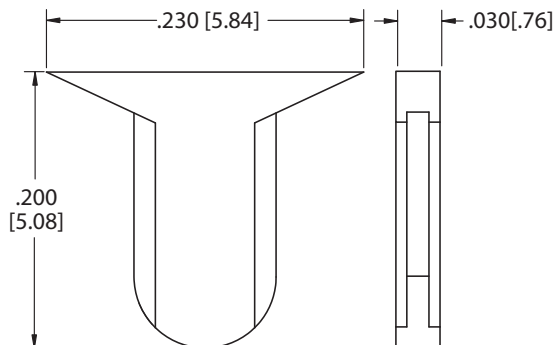
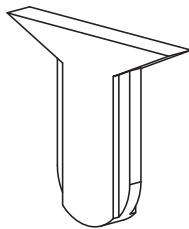
SULLINS PART: PLM-K2



IN BETWEEN CONTACT KEY

P/N: 04-0003-000

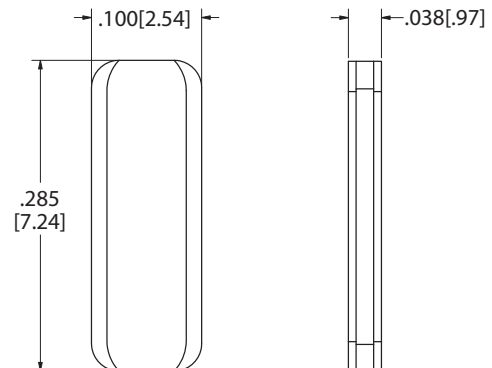
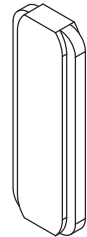
SULLINS PART: PLA-K1



IN BETWEEN CONTACT KEY

P/N: 04-0004-000

SULLINS PART: PLC-K1





Now it is faster and easier to identify connectors when you only have a part number. Simply use your part number to find the pages containing more information about your connector in this catalog and then contact us to place an order.

The underscore sign represents design variations in the part number coding. For example: if your part number is **EBA10DCAS**, you would look for **__ A __ DCA __**, which is on pages 50-51.

SULLINS EDGE CARDS AND HEADERS

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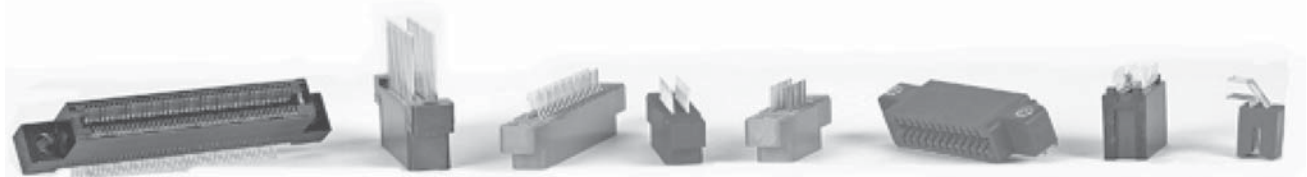


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