

YOUR CONNECTION TO QUALITY AND SERVICE

EDAC - A WORLD-CLASS CONNECTOR COMPANY

Since its formation over 30-years ago, EDAC Inc. has grown to become one of the world's leading manufacturers of card-edge, rack-and-panel, D-Subminiature and specialty telecom connectors. Its strong and loyal customer base know EDAC's motto - **Your Connection to Quality and Service** - guarantees a comprehensive variety of custom connectors backed by superior customer service.

EDAC is not content to rest on its three-decade reputation for quality and service. It continually strives to improve its competitiveness, while performing to the best standards of the connector industry. The realization of the global economy and its industry-wide impact have changed the direction at EDAC. Its goals and objectives start with you: *the customer*. Its stated aim is to be the best connector company, offering superior world-class service.

EDAC is positioned to win on a global scale. Its three Customer Logistics Centres - in Toronto, London and Hong Kong - manage just-in-time inventories to respective markets. New design-to-volume programs include surface mount and pin-and-paste 'reflow' soldering connectors. There are 18 sales offices in the U.S., 12 in Europe, 11 in Canada and the rest of the world. Distribution requirements are served through over 100 stocking locations in the U.S., and in locations throughout Europe, including Germany, England, Italy, Switzerland, France and Spain.

While striving for new customers worldwide, EDAC remembers its established customers; to them, EDAC extends its sincerest thanks for the privilege of serving their past needs, and for being a part of their new and exciting plans for the future. EDAC's newer customers soon discover what its older customers rely upon: EDAC is their **Connection to Quality and Service**.

**CHECK OUT EDAC'S WEB SITE:
A World-Class Connector Company
On The Worldwide Web**



YOUR CONNECTION TO QUALITY AND SERVICE

621/622 SERIES	4
Plug and Receptacle, Right Angle, .318" (8.08mm) Footprint	4, 5
623/624 SERIES	6
Plug and Receptacle, Right Angle, .200" (5.08mm) Footprint	6, 7
625/626 SERIES	8
Plug and Receptacle, Right Angle, .590" (14.99mm) Footprint	8, 9
627/628 SERIES	10
Plug and Receptacle, Vertical, PCB Mount, METAL Body Configurations	10, 11
Plug and Receptacle, Vertical, PCB Mount, PLASTIC Body Configurations	12, 13
629/630 SERIES	14
Plug and Receptacle, Right Angle, .370" (9.44mm) Footprint	14, 15
632 SERIES	16
Receptacle, Right Angle, High-Density, .125" (3.175mm) Footprint	16, 17
633/634 SERIES	18
Plug and Receptacle, Right Angle, High-Density, .350" (8.89mm) Footprint	18, 19
637/638 SERIES	20
Plug and Receptacle, Vertical High-Density, PCB Mount, Metal Body	20, 21
661/662/663/664 SERIES	22
Plug and Receptacle Combination, Dual Port, Right Angle Connectors	22, 23
GROUNDING AND MOUNTING OPTIONS	24
Dual Port Connectors	24
Right Angle Connectors, All Series	25
Straight Connectors	26
HOLE PATTERN RECOMMENDED	27
Series 619, 620, 622, 627, 628, 629, 630	27
Series 625, 626	28
Series 633, 634	29
Series 632, 637, 638	30
ENGINEERING NOTES	31
Insulation/Contact/Metal Hardware Material, Contact Finish, ULA	31
Special Variation Connectors, Environmental Responsibility, General Notes	32
Plating Codes, Thermal Properties of Insulator Molding Materials	33

621/622 SERIES



FEATURES

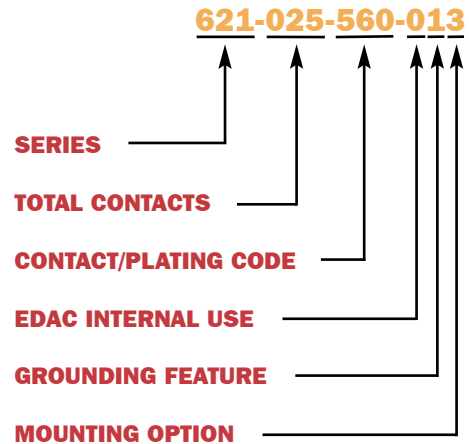
- Two contact rows with .318" (8.08mm) footprint right-angle bend.
- .109" (2.77mm) contact spacing x .112" (2.82mm) row spacing.
- Plug and receptacle in 9-, 15-, 25- or 37-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include top or bottom ground plates and four-prong boardlock for superior retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization.
- Design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Ferrite Specifications: Attenuation - 20dB MIN @ 30Mhz, 30dB MIN @ 50MHz, and 50dB MIN @ 100Mhz.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area; tin/lead plating on contact tails.
- Shell Material: Nickel-plated steel.
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000 V AC rms @ sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C
- Engagement & Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

621/622 SERIES ORDERING CODE

Example:



SERIES

621Plug
622Receptacle

TOTAL CONTACTS

009, 015, 025, 03750 (machined pin only)

CONTACT/PLATING CODE

260Gold Flash (Class 3)
56010μ" (0.25μm) (Class 2)
66030μ" (0.76μm) (Class 1)
668Ferrite Filter

EDAC INTERNAL USE

0Indicates generic internal use code

GROUNDING FEATURE

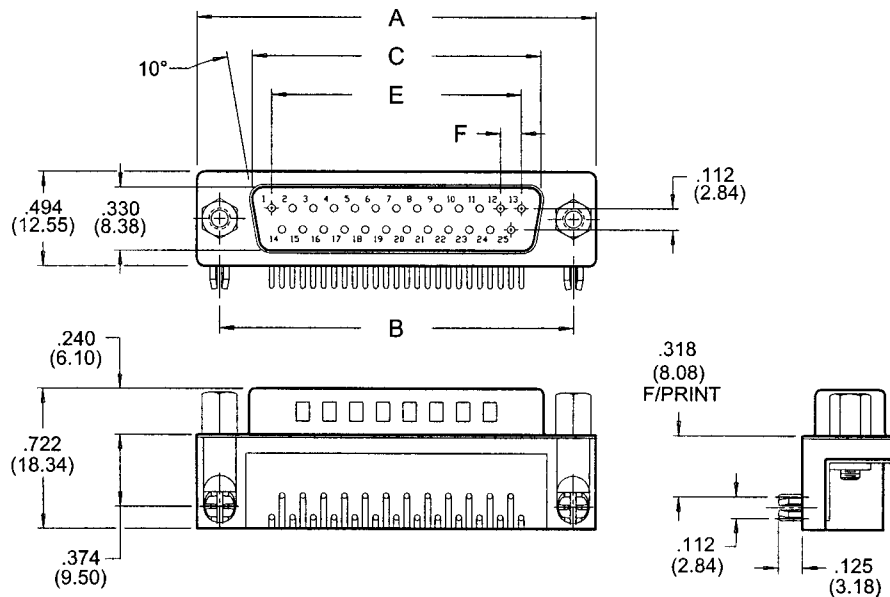
1120" (3.05mm) dia. through hole top ground
3 ..Two-prong boardlocks for .120" (3.05mm) dia. PCB hole
4 ..Four-prong boardlocks for .120" (3.05mm) dia. PCB hole

MOUNTING OPTION

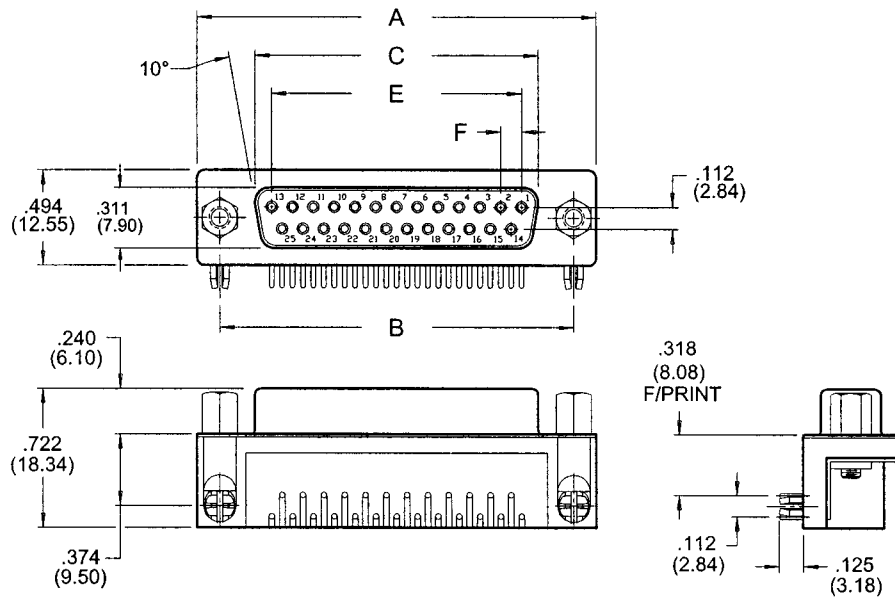
0#4-40 UNC fixed standoff
1125" (3.18mm) dia. through-hole
2#4-40 UNC threaded insert
3#4-40 UNC threaded standoff
5#4-40 UNC threaded standoff & lock washer

621/622 SERIES

PLUG 621 SERIES



RECEPTACLE 622 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(53.08)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)

Plug and Receptacle, Right Angle, .318" (8.08mm) Footprint

623/624 SERIES



FEATURES

- Two contact rows with .200" (5.08mm) footprint right angle bend.
- .109" (2.77mm) contact spacing x .112" (2.82mm) row spacing.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization.
- Design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin-lead plating on contact tails.
- Shell Material: Nickel-plated steel. (tin/lead optional)
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

623/624 SERIES ORDERING CODE

Example:

624-025-261-033

SERIES

TOTAL CONTACTS

CONTACT/PLATING CODE

EDAC INTERNAL USE

GROUNDING FEATURE

MOUNTING OPTION

SERIES

623 (9-pin only) Plug
624 Receptacle

TOTAL CONTACTS

009, 015, 025

CONTACT/PLATING CODE

261 Gold Flash (Class 3)
361 15µ" (0.38µm) (Class 2)
661 30µ" (0.76µm) (Class 1)

EDAC INTERNAL USE

0 Indicates generic internal use code

GROUNDING FEATURE

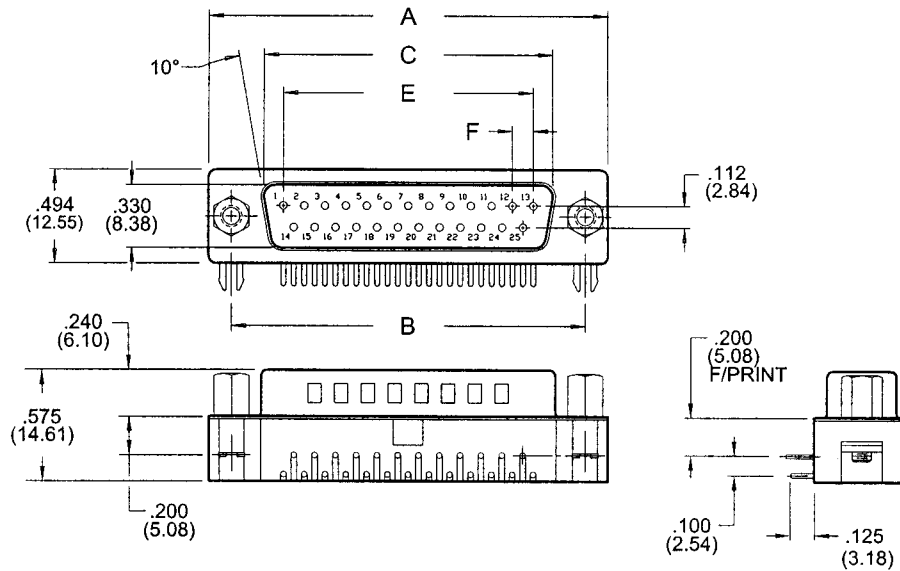
3 Two-prong boardlocks for .120" (3.05mm) dia. hole

MOUNTING OPTION

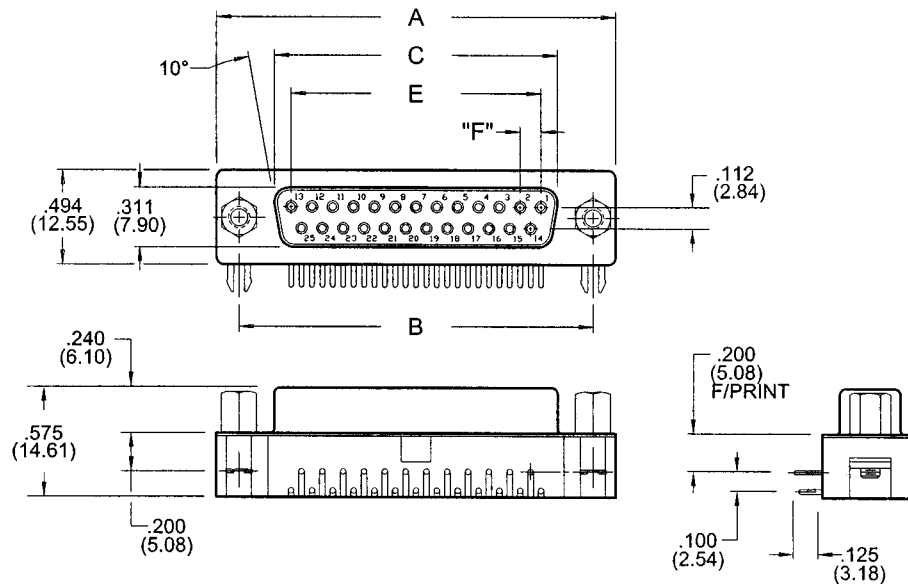
1125" (3.18mm) dia. through-hole
2 #4-40 UNC threaded insert
3 #4-40 UNC hex standoff

623/624 SERIES

PLUG 623 SERIES



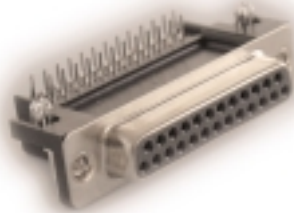
RECEPTACLE 624 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)

Plug and Receptacle, Right Angle, .200" (5.08mm) Footprint

625/626 SERIES



FEATURES

- Two contact rows with .590" (14.99mm) footprint right angle bend.
- .109" (2.77mm) contact spacing x .112" (2.82mm) row spacing.
- Plug and receptacle in 9-, 15-, 25- or 37-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include top and bottom ground plates and four-prong boardlock for superior retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Nickel-plated steel.
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

625/626 SERIES ORDERING CODE

Example:

626-037-562-043

SERIES

TOTAL CONTACTS

CONTACT/PLATING CODE

EDAC INTERNAL USE

GROUNDING FEATURE

MOUNTING OPTION

SERIES

625Plug
626Receptacle

TOTAL CONTACTS

009, 015, 025, 037

CONTACT/PLATING CODE

Right angle .590" (14.99mm) footprint

262Gold Flash (Class 3)
56210μ" (0.25μm) (Class 2)
66230μ" (0.76μm) (Class 1)

EDAC INTERNAL USE

0Indicates generic internal use code

GROUNDING FEATURE

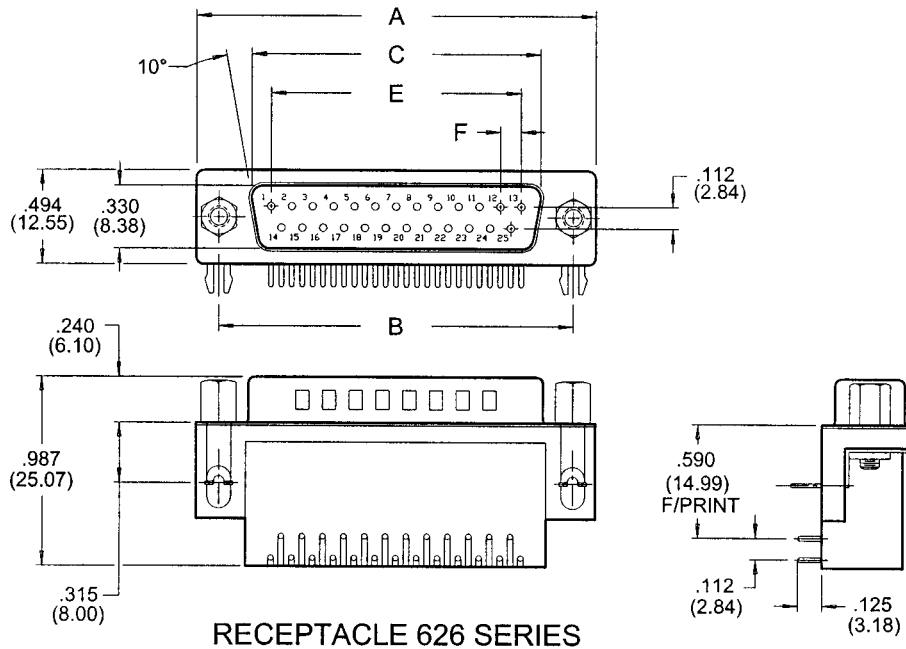
1120" (3.05mm) dia. through-hole top ground
2120" (3.05mm) dia. through-hole bottom ground
3Two-prong boardlock for .120" (3.05mm) dia. PCB hole
4Four-prong boardlock for .120" (3.05mm) dia. PCB hole

MOUNTING OPTION

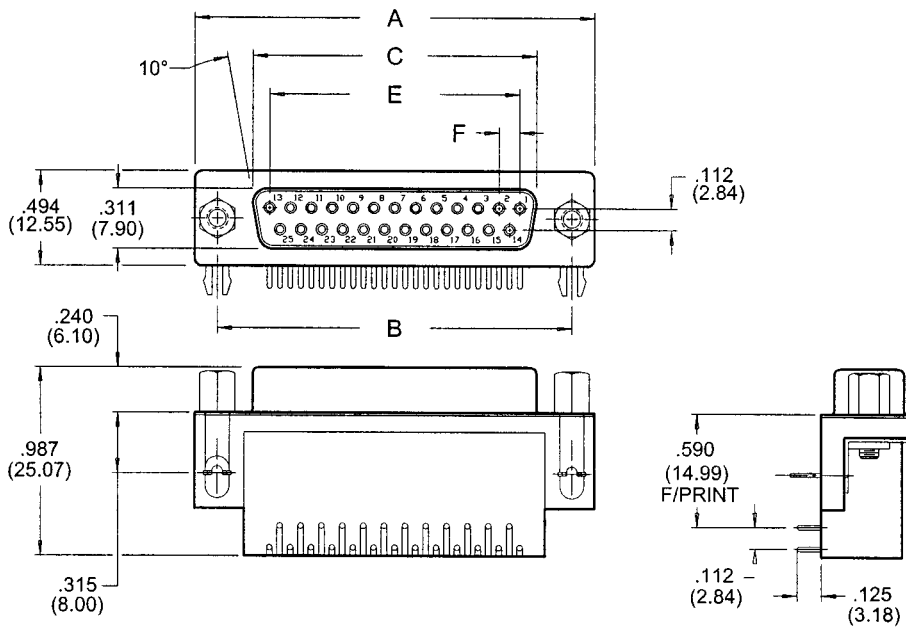
0Fixed hex standoff
1125" (3.18mm) dia. through-hole
2#4-40 UNC threaded insert
3#4-40 UNC threaded standoff

625/626 SERIES

PLUG 625 SERIES



RECEPTACLE 626 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(53.08)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)

Plug and Receptacle, Right Angle, .590" (14.99mm) Footprint

627/628 SERIES



FEATURES

- Both low and high profiles available.
- .109" (2.77mm) contact spacing x .112" (2.82mm) row spacing.
- Plug and receptacle in 9-, 15-, 25-, 37- and 50-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Ferrite Specifications: Attenuation - 20dB MIN @ 30Mhz, 30dB MIN @ 50Mhz and 50db MIN @ 100Mhz.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Nickel-plated steel (tin/lead optional)
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

627/628 SERIES ORDERING CODE

Example:

627-025-220-047

SERIES

TOTAL CONTACTS

PLATING CODE

CONTACT CODE

EDAC INTERNAL USE

BODY STYLE

MOUNTING OPTION

SERIES

627Plug

628Receptacle

TOTAL CONTACTS

009, 015, 025, 037, 050

PLATING CODE

2Gold Flash (Class 3)

315μ" (0.38μm) (Class 2)

630μ" (0.76μm) (Class 1)

CONTACT CODE

20PC tail .125" (3.18mm)

21PC tail .165" (4.18mm)

22Solder cup termination

28Ferrite filter

EDAC INTERNAL USE

0Indicates generic internal use code

BODY STYLE

4Metal covered .276" (7.00mm) low profile

5Metal covered .472" (12.00mm) high profile

6Metal covered machined contacts low profile

MOUNTING OPTION

1125" (3.18mm) dia. through-hole

2#4-40 UNC threaded inserts

3#4-40 UNC threaded standoffs

6#4-40 UNC threaded insert with boardlocks

7#4-40 UNC threaded standoff with boardlocks

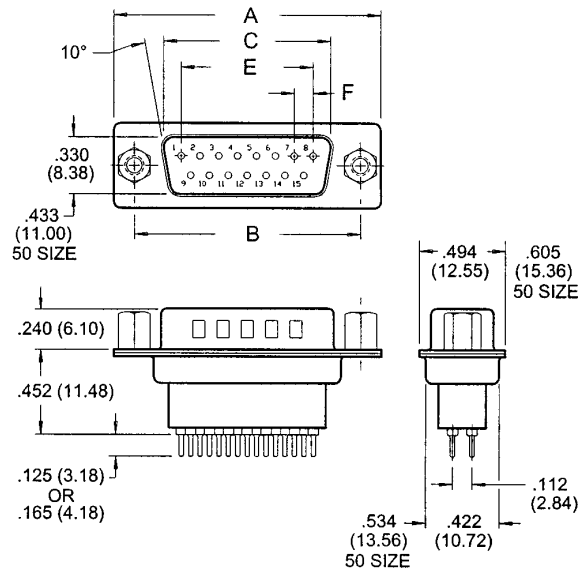
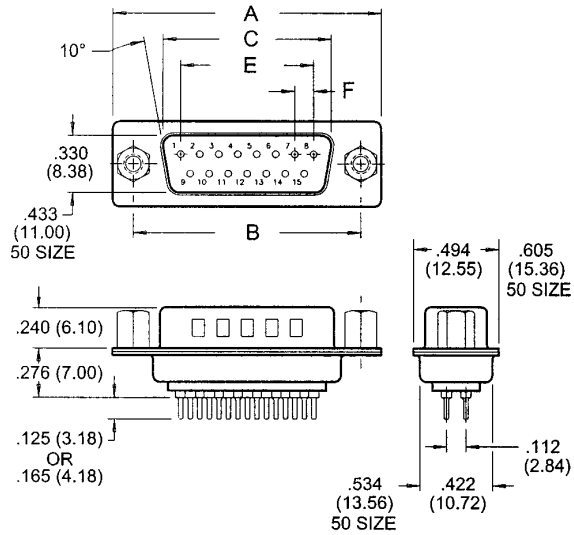
8#4-40 UNC threaded fixed standoffs

627/628 SERIES

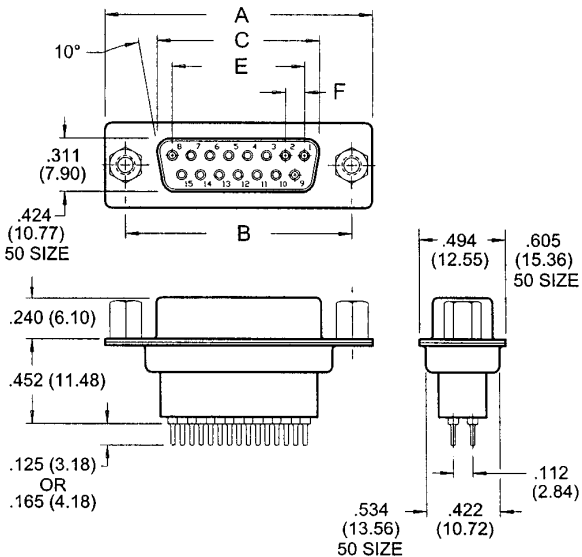
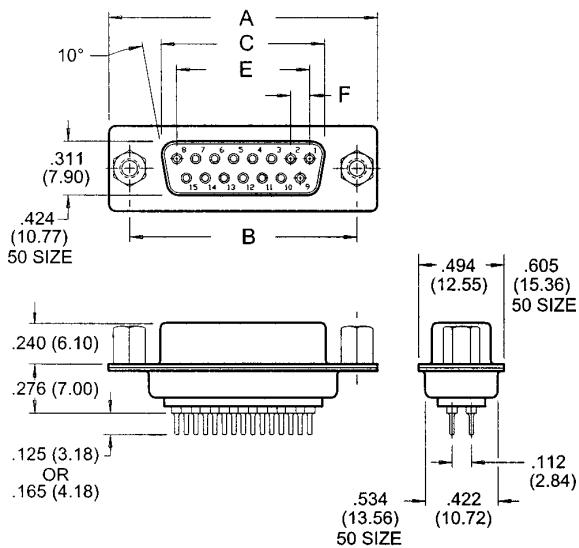
LOW PROFILE

PLUG 627 SERIES

HIGH PROFILE



RECEPTACLE 628 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(53.08)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)
50	2.640	(67.05)	2.406	(61.11)	2.080	(52.83)	2.054	(52.17)	1.740	(44.20)	.109	(2.76)

Plug and Receptacle, Vertical, PCB Mount, METAL Body Configurations

627/628 SERIES



FEATURES

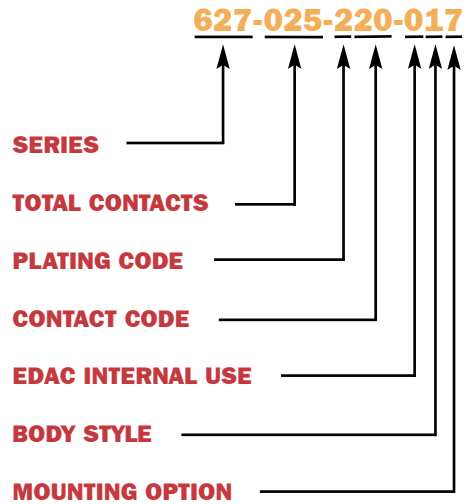
- Low profile available.
- .109" (2.77mm) contact spacing
x .112" (2.82mm) row spacing.
- Plug and receptacle in 9-, 15-, 25-, 37-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Nickel-plated steel (tin/lead optional)
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

627/628 SERIES ORDERING CODE

Example:



SERIES

627Plug
628Receptacle

TOTAL CONTACTS

009, 015, 025, 037

PLATING CODE

2Gold Flash (Class 3)
315μ" (0.38μm) (Class 2)
630μ" (0.76μm) (Class 1)

CONTACT CODE

20PC tail .140" (3.18mm)
21PC tail .165" (4.18mm)

EDAC INTERNAL USE

0Indicates generic internal use code

BODY STYLE

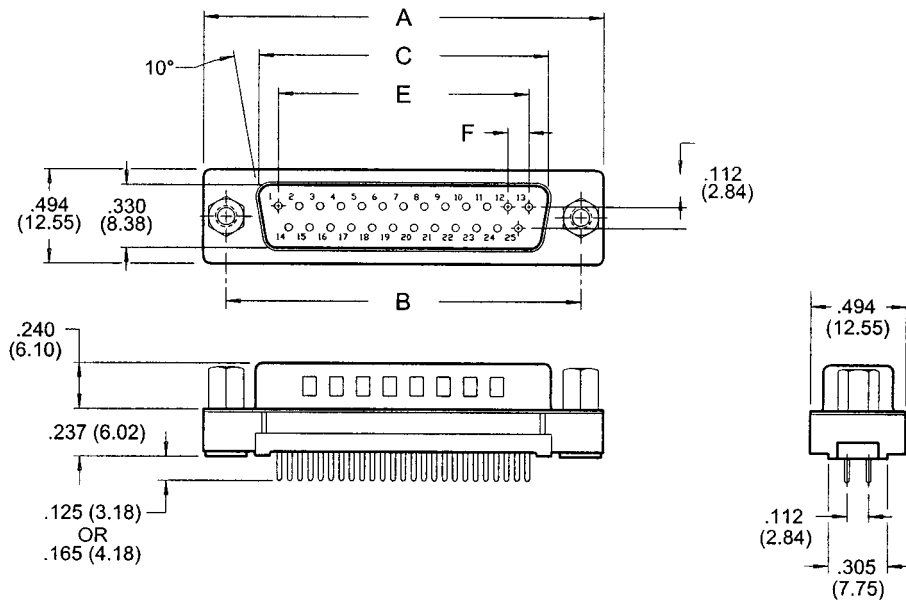
1Plastic .237" (6.02mm) low profile, polyester

MOUNTING OPTION

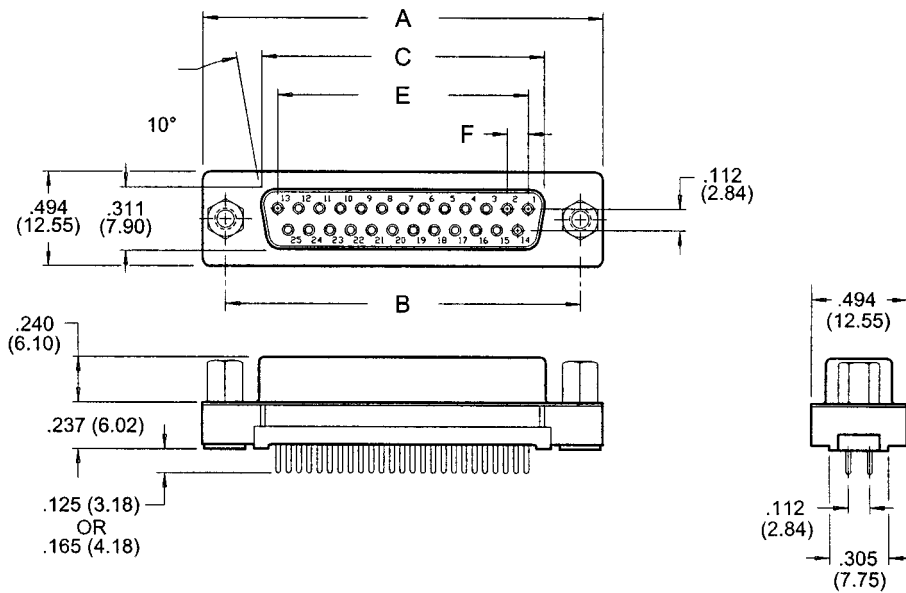
1125" (3.18mm) dia. through-hole
2#4-40 UNC threaded inserts
3#4-40 UNC threaded standoffs
4#4-40 UNC threaded insert with dip solder prongs
5#4-40 UNC threaded standoff with dip solder prongs
6#4-40 UNC threaded insert with boardlocks
7#4-40 UNC threaded standoff with boardlocks

627/628 SERIES

PLUG 627 SERIES



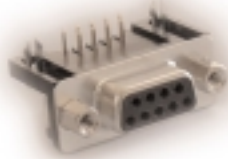
RECEPTACLE 628 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(53.08)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)

Plug and Receptacle, Vertical, PCB Mount, PLASTIC Body Configurations

629/630 SERIES



FEATURES

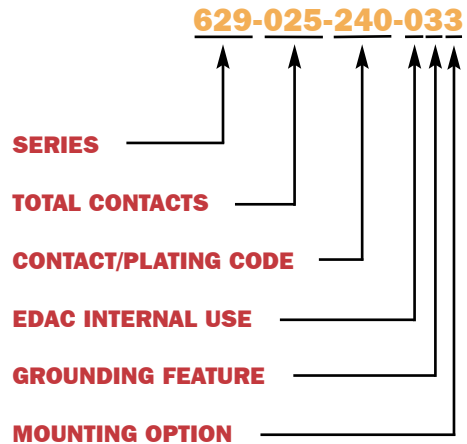
- Two contact rows with .370" (9.44mm) footprint right angle bend.
- .109" (2.77mm) contact spacing x .112" (2.82mm) row spacing.
- Plug and receptacle in 9-, 15-, 25-, 37-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Tin/lead plated steel. (nickel optional)
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

629/630 SERIES ORDERING CODE

Example:



SERIES

629Plug
630Receptacle

TOTAL CONTACTS

009, 015, 025, 37

CONTACT/PLATING CODE

240Gold Flash (Class 3)
34015μ" (0.38μm) (Class 2)
64030μ" (0.76μm) (Class 1)

EDAC INTERNAL USE

0Indicates generic internal use code

GROUNDING FEATURE

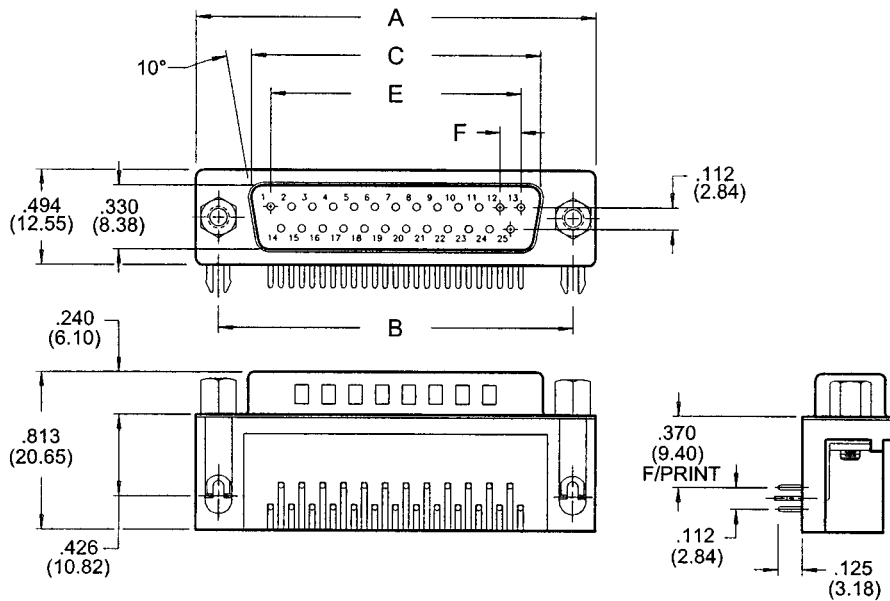
1120" (3.05mm) dia. through hole top ground
2120" (3.05mm) dia. through hole bottom ground
3... Two-prong boardlock for .120" (3.05mm) dia. PCB hole

MOUNTING OPTION

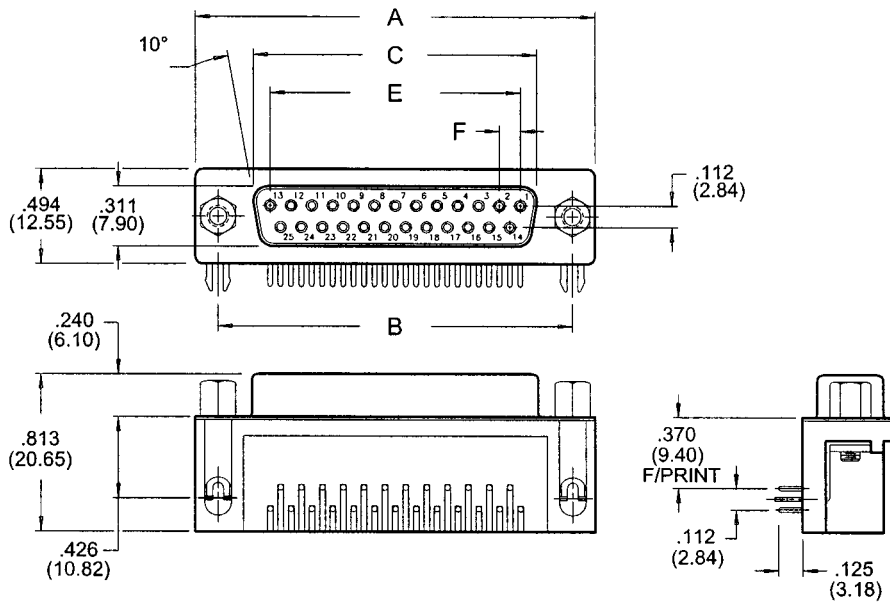
0#4-40 UNC standoff w/ threaded insert
1125" (3.18mm) dia. through-hole
2#4-40 UNC threaded insert
3..... #4-40 UNC hex standoff w/ threaded insert

629/630 SERIES

PLUG 629 SERIES



RECEPTACLE 630 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(53.08)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)

Plug and Receptacle, Right Angle, .370" (9.44mm) Footprint

632 SERIES



FEATURES

- High-density three contact rows with .125" (3.175mm) footprint right angle bend.
- .090" (2.29mm) contact spacing x .079" (1.905mm) row spacing.
- Receptacle in 15-pin contact size.
- Socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Contact Material: receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Nickel plated steel.
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

632 SERIES ORDERING CODE

Example:

632-015-266-033

SERIES

TOTAL CONTACTS

CONTACT/PLATING CODE

EDAC INTERNAL USE

GROUNDING FEATURE

MOUNTING OPTION

SERIES

632Receptacle

TOTAL CONTACTS

015

CONTACT/PLATING CODE

266Gold Flash (Class 3)

36615µ" (0.38µm) (Class 2)

56610µ" (0.25µm) (Class 2)

66630µ" (0.76µm) (Class1)

EDAC INTERNAL USE

0Indicates generic internal use code

GROUNDING FEATURE

3Two-prong boardlocks for .120" (3.05) dia. hole

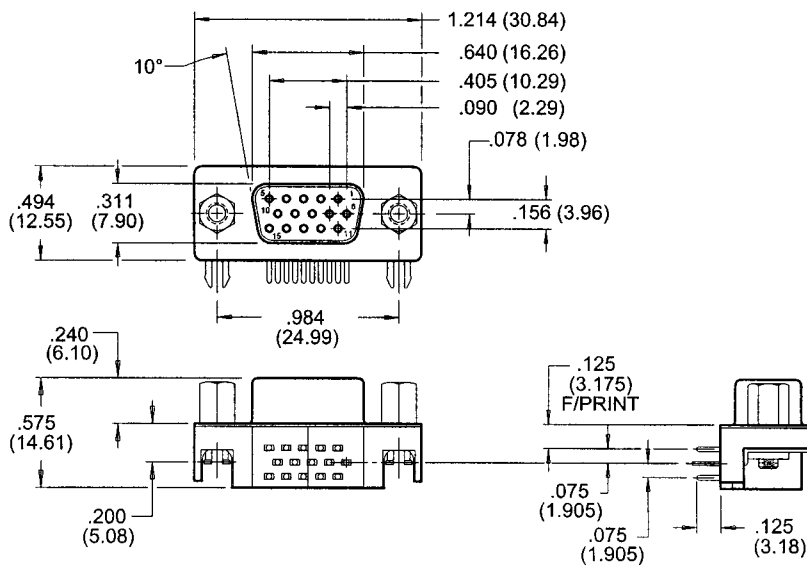
MOUNTING OPTION

2#4-40 UNC threaded insert

3 ...#4-40 UNC threaded standoff w/ threaded insert

632 SERIES

RECEPTACLE 632 SERIES



Receptacle, Right Angle, High-Density, .125" (3.175mm) Footprint

633/634 SERIES



FEATURES

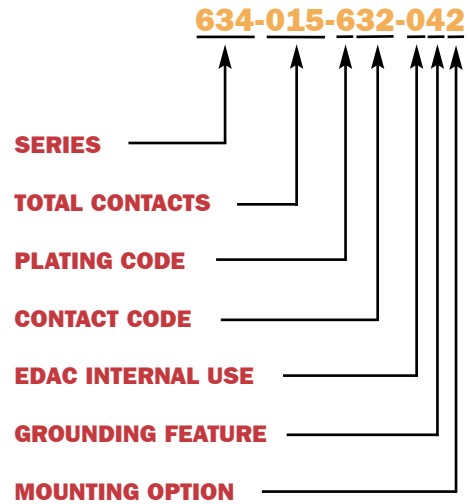
- High-density three contact rows with .350" (8.89mm) footprint right angle bend.
- .090" (2.29mm) contact spacing x .078" (1.98mm) row spacing.
- Optional 9th contact recessed by .050" (1.27mm) on 15-pin part, in accordance with VESA Display Data Channel Standard.
- Receptacles and plugs 15-, 26-, 44-, 62- and 78-pin contact sizes.
- Socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include top or bottom ground plates and two- or four-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black or blue.
- Ferrite Specifications: Attenuation - 17dB MIN @ 30Mhz, 25dB MIN @ 50Mhz and 40dB @ 100Mhz.
- Contact Material: receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Tin/lead plated steel.
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

633/634 SERIES ORDERING CODE

Example:



SERIES

633Plug
634Receptacle

TOTAL OF CONTACTS

015, 026, 044, 062 (078 - Female Only)

PLATING CODE

2Gold Flash (Class 3)
510μ" (0.25μm) (Class 2)
630μ" (0.76μm) (Class 1)

CONTACT CODE

63Standard contacts, black plastic
68Ferrite filter
73 ...9th contact recessed .050" (1.27mm), black insulator
749th contact recessed .050" (1.27mm), blue insulator

EDAC INTERNAL USE

0Indicates generic internal use code

GROUNDING FEATURE

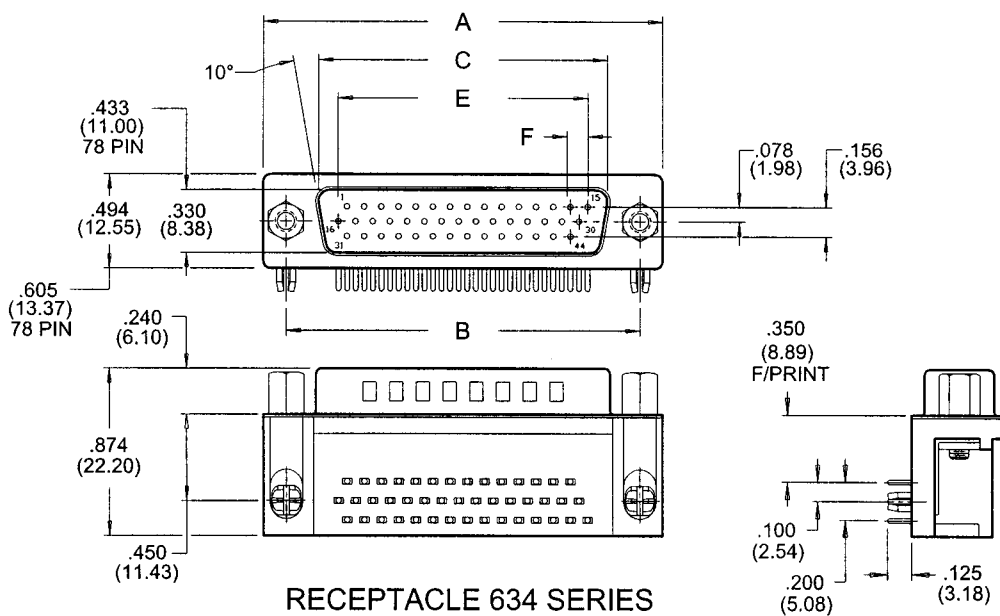
1120" (3.05mm) dia. through-hole top ground
2 .. .120" (3.05mm) dia. through-hole bottom ground (633)
3Two-prong boardlocks for .120" (3.05mm) dia. hole
4 ...Four-prong boardlocks for .120" (3.05mm) dia. hole
9High-temperature four-prong boardlocks

MOUNTING OPTION

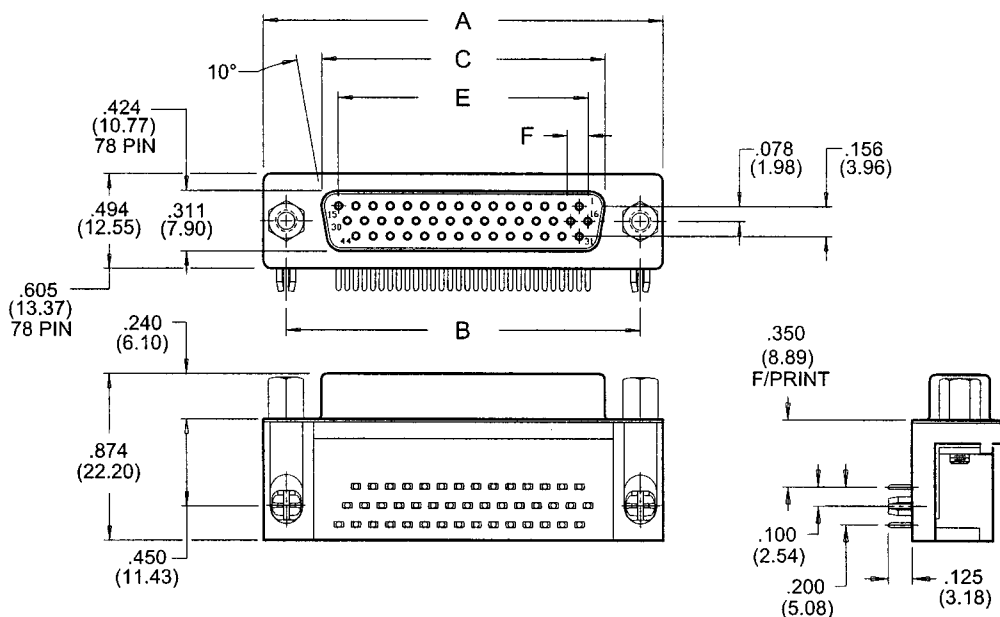
0#4-40 UNC standoff w/ threaded insert
1125" (3.18mm) dia. through-hole
2#4-40 UNC threaded insert
3#4-40 UNC hex standoff w/ threaded insert

633/634 SERIES

PLUG 633 SERIES



RECEPTACLE 634 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
15	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.405	(10.29)	.090	(2.29)
26	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.765	(19.43)	.090	(2.29)
44	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.305	(33.15)	.090	(2.29)
62	2.730	(69.34)	2.500	(63.50)	2.182	(55.42)	2.156	(54.76)	1.947	(49.45)	.095	(2.41)
78	2.635	(66.93)	2.406	(61.11)	2.090	(53.08)	2.064	(52.43)	1.805	(45.85)	.095	(2.41)

Plug and Receptacle, Right Angle, High-Density, .350" (8.89mm) Footprint

637/638 SERIES



FEATURES

- High profile available in machine contacts. (15- and 26-pin contacts only)
- .090" (2.29mm) contact spacing x .078" (1.98mm) row spacing.
- Plug and receptacle in 15-, 26-, 44-, 62- and 78-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts boardlocks and removable or fixed threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Ferrite Specifications: Attenuation - 20dB MIN @ 30Mhz, 30dB MIN @ 50Mhz and 50dB MIN @ 100Mhz.
- Contact Material: Plug - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Nickel-plated steel. (Tin/lead optional)
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

637/638 SERIES ORDERING CODE

Example:

637-015-230-047

SERIES

TOTAL CONTACTS

PLATING CODE

CONTACT CODE

EDAC INTERNAL USE

BODY STYLE

MOUNTING OPTION

SERIES

637Plug

638Receptacle

TOTAL CONTACTS

015, 026, 044, 062, 078

PLATING CODE

2Gold Flash (Class 3)

315µ" (0.38µm) (Class 2)

630µ" (0.76µm) (Class 1)

CONTACT CODE

30Low profile PC tails, .157" (4.00mm)

31High profiles PC tails, .169" (4.30mm)

22/32Solder cup

EDAC INTERNAL USE

0Indicates generic internal use code

BODY STYLE

4Metal covered .276" (7.00mm) low profile

5Metal covered .472" (12.00mm) high profile (15-/26-pin)

MOUNTING OPTION

1125" (3.18mm) dia. through-hole

2#4-40 UNC threaded inserts

3#4-40 UNC threaded standoffs

6#4-40 UNC threaded insert w/ boardlocks

7#4-40 UNC threaded standoff w/ boardlocks

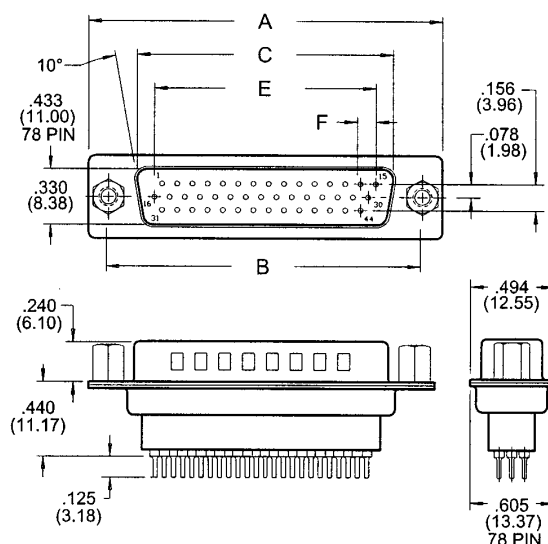
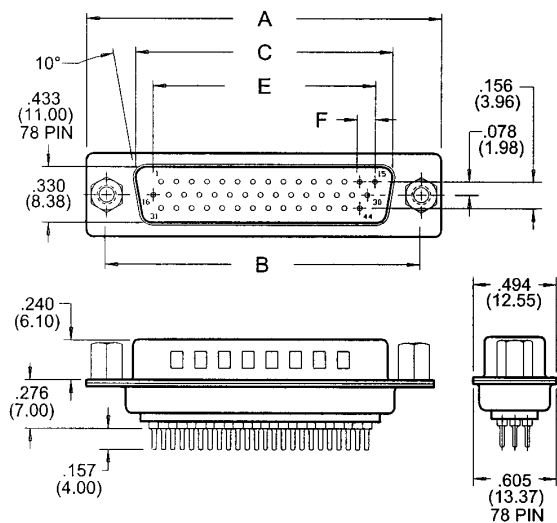
8#4-40 UNC threaded fixed standoffs

637/638 SERIES

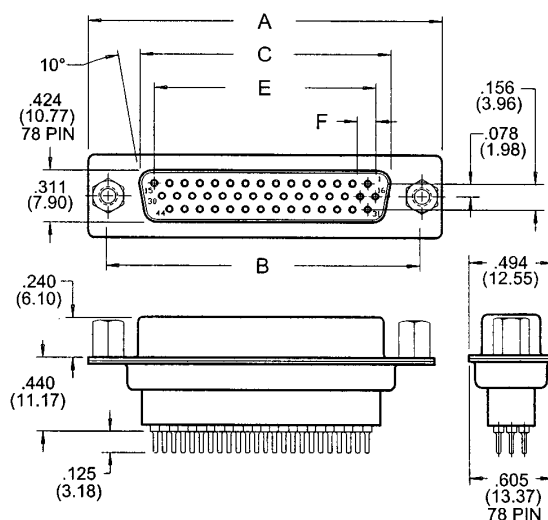
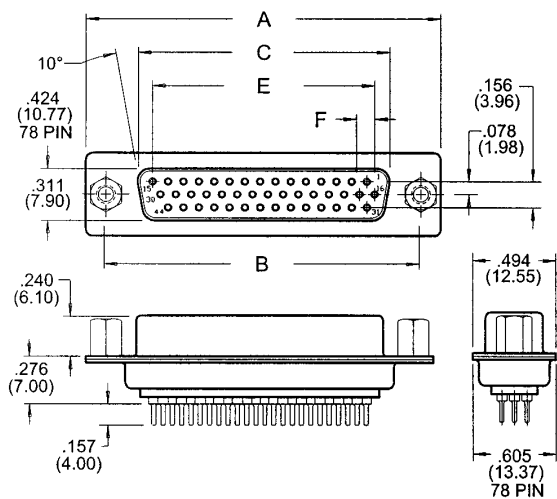
LOW PROFILE

PLUG 637 SERIES

HIGH PROFILE



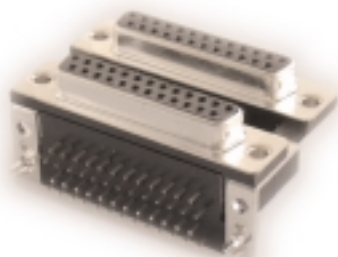
RECEPTACLE 638 SERIES



NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
15	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.405	(10.29)	.090	(2.29)
26	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.765	(19.43)	.090	(2.29)
44	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.305	(33.15)	.090	(2.29)
62	2.730	(69.34)	2.500	(63.50)	2.182	(55.42)	2.156	(54.76)	1.947	(49.45)	.095	(2.41)
78	2.635	(66.93)	2.406	(61.11)	2.090	(53.08)	2.064	(52.43)	1.805	(45.85)	.095	(2.41)

Plug and Receptacle, Vertical High-Density, PCB Mount, Metal Body

661/662/663/664 SERIES



FEATURES

- Two contact rows per connector with right angle bend.
- Plug and receptacle in 9-, 15-, 25- or 37-pin contact sizes.
- Pin and socket contact mating design with PC tail termination.
- Metal shell provides EMI/RFI shielding. Plug shell indents provide grounding and additional mating retention.
- Grounding features include grounding bracket and two-prong boardlock for exceptional retention to PC board.
- Mounting options for panel mount or connector mating include through-hole, threaded inserts and threaded standoffs.
- D-shaped connector mating outline provides polarization design based on requirements of MIL-C-24308, EIA RS-232 and RS-449.

SPECIFICATIONS

- Insulator Material: Thermoplastic polyester, UL 94V-0; chemical resistant; colour - black.
- Ferrite Specifications: Attenuation - 20dB MIN @ 30Mhz, 30dB MIN @ 50Mhz and 50dB MIN @ 100Mhz.
- Contact Material: Plug contacts - brass; receptacle contacts - phosphor bronze.
- Contact Plating: Gold (see *Ordering Code*) over nickel for the mating area, tin/lead plating on contact tails.
- Shell Material: Tin/lead plated steel.
- Current Rating: 5 amperes.
- Contact Resistance: 10 milliohms maximum.
- Dielectric Withstanding Voltage: 1000V AC rms at sea level.
- Insulation Resistance: 5000 megohms minimum.
- Operating Temperature: -55° to +105° C.
- Engagement and Separation Force: 1 to 10 oz. (0.28 to 2.78 N) per contact position.

661 - 664 SERIES ORDERING CODE

Example:

661-025-264-013

SERIES

TOTAL CONTACTS

PLATING CODE

CONTACT CODE

EDAC INTERNAL USE

GROUNDING FEATURE

MOUNTING OPTION

SERIES

661 Plug over plug
662 Receptacle over receptacle
663 Plug over receptacle
664 Receptacle over plug

TOTAL CONTACTS

009, 015, 025, 037, 050

PLATING CODE

2 Gold Flash (Class 3)
315μ" (0.38μm) (Class 2)
630μ" (0.76μm) (Class 1)

CONTACT CODE

64 Regular density connectors
67 25-pin female/SCSI II 50 female
68 Ferrite filter (9- and 25-pin only)
69 Any high-density connector combination

EDAC INTERNAL USE

0150" (3.81mm) between upper/lower contact rows
0160" (4.06mm) between upper/lower contact rows

GROUNDING FEATURE

1125" (3.18mm) dia. through-hole
3 Two-prong boardlocks for PCB hole
5 #4-40 UNC threaded mounting hole
7 Rear only two-prong boardlocks

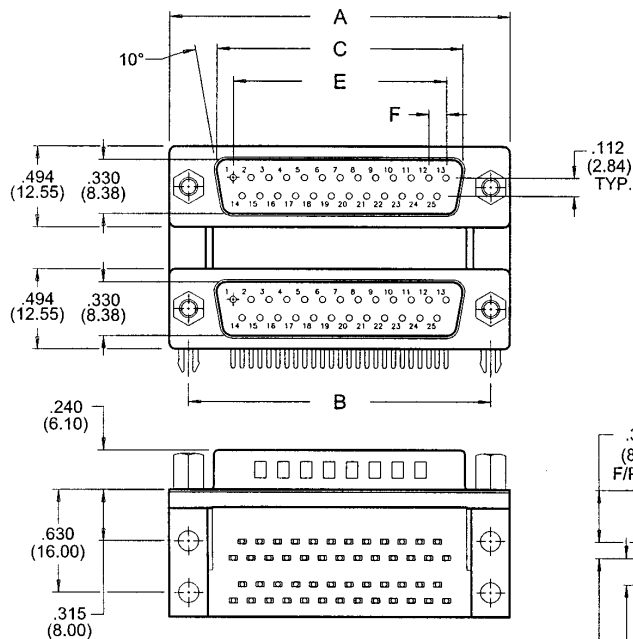
661/662/663/664 SERIES

MOUNTING OPTION

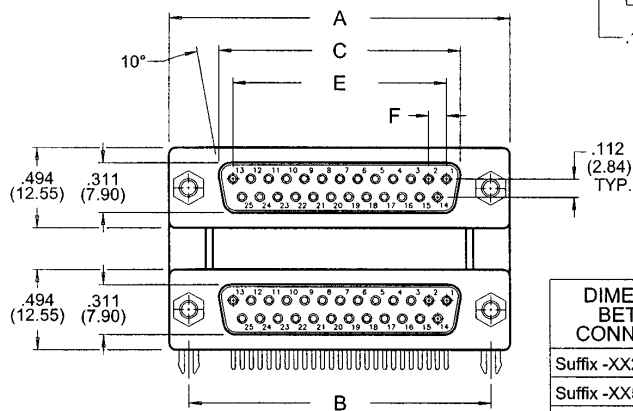
- 2**625" (15.88mm) #4-40 unified threaded insert
3 .. .625" (15.88mm) #4-40 unified threaded hex standoff
4625" (15.88mm) .125" clear hole insert
5750" (19.05mm) #4-40 unified threaded insert

- 6** .. .750" (19.05mm) #4-40 unified threaded hex standoff
7750" (19.05mm) .125" clear hole insert
8900" (22.86mm) #4-40 unified threaded insert
9 .. .900" (22.86mm) #4-40 unified threaded hex standoff
0900" (22.86) .125" clear hole insert

PLUG/PLUG 661 SERIES



RECEPTACLE/RECEPTACLE 662 SERIES



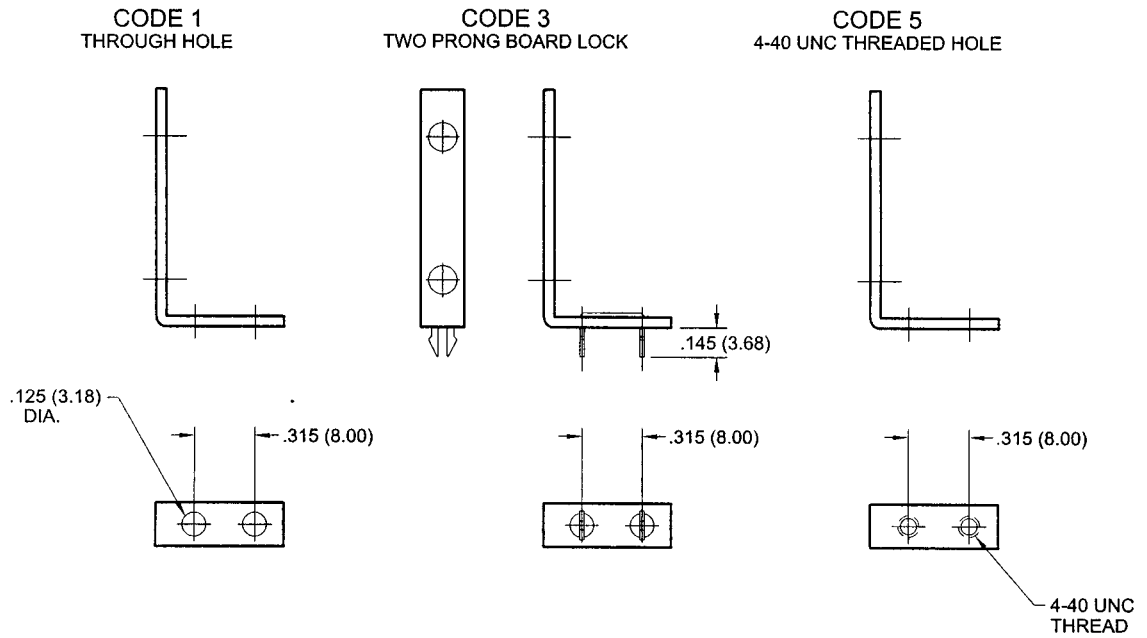
DIMENSIONS BETWEEN CONNECTORS	J		K	
	Inch	(mm)	Inch	(mm)
Suffix -XX2, -XX3, -XX4	.625	(15.88)	1.119	(28.42)
Suffix -XX5, -XX6, -XX7	.750	(19.05)	1.244	(31.60)
Suffix -XX8, -XX9, -XX0	.900	(22.86)	1.394	(35.41)

NUMBER OF CONTACTS	A		B		C PLUG		C RECEPTACLE		E		F	
	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)	Inch	(mm)
9	1.214	(30.84)	.984	(24.99)	.667	(16.92)	.640	(16.26)	.432	(10.97)	.108	(2.74)
15	1.545	(39.24)	1.312	(33.32)	.994	(25.25)	.967	(24.56)	.756	(19.20)	.108	(2.74)
25	2.088	(53.04)	1.852	(47.04)	1.534	(38.96)	1.508	(38.30)	1.304	(33.12)	.109	(2.76)
37	2.730	(69.34)	2.500	(63.50)	2.182	(55.42)	2.156	(54.76)	1.956	(49.68)	.109	(2.76)

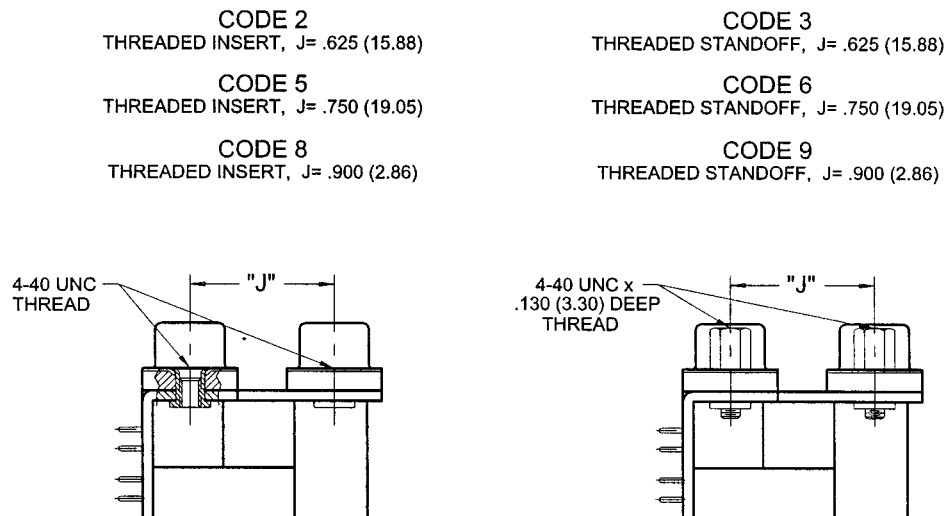
Plug and Receptacle Combination, Dual Port, Right Angle Connectors

GROUNDING AND MOUNTING OPTIONS

GROUNDING FEATURES FOR DUAL PORT P.C.B.



MOUNTING OPTIONS FOR DUAL PORT P.C.B.



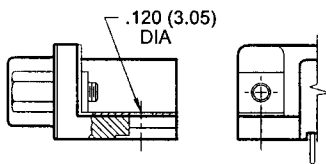
GROUNDING AND MOUNTING OPTIONS

OPTIONS HARDWARE FOR RIGHT ANGLE P.C.B.

GROUNDING

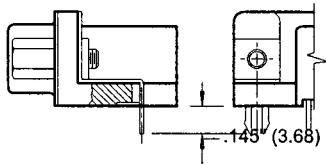
CODE 1

TOP GROUND PLATE



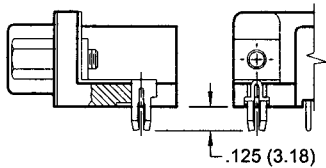
CODE 3

TWO PRONG BOARD LOCK



CODE 4

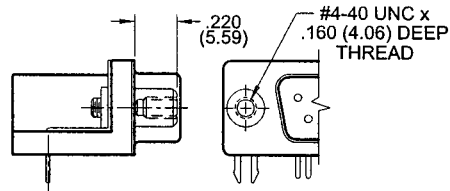
FOUR PRONG BOARD LOCK



MOUNTING

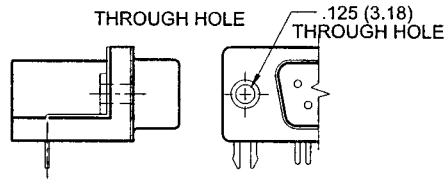
CODE 0

FIXED ROUND STANDOFF WITH THREADED INSERT



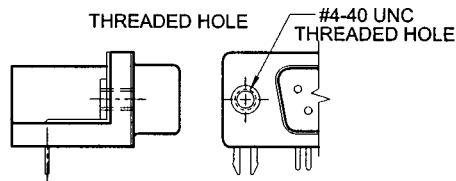
CODE 1

THROUGH HOLE



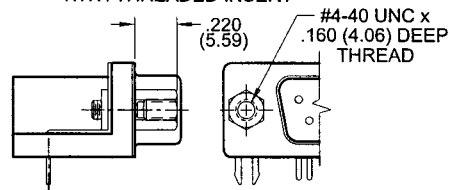
CODE 2

THREADED HOLE



CODE 3

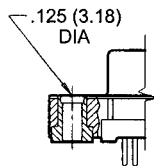
THREADED HEX. STANDOFF WITH THREADED INSERT



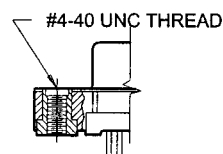
GROUNDING AND MOUNTING OPTIONS

MOUNTING OPTIONS FOR STRAIGHT P.C.B.

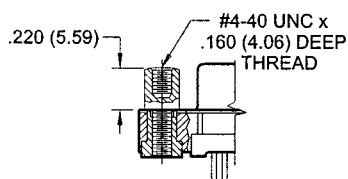
CODE 1
THROUGH HOLE



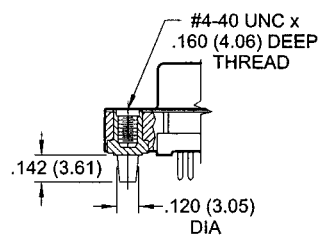
CODE 2
THREADED INSERT



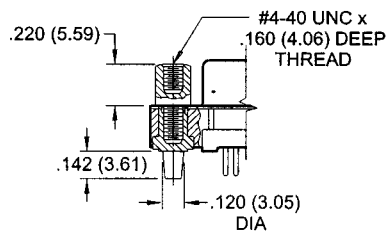
CODE 3
THREADED STANDOFF



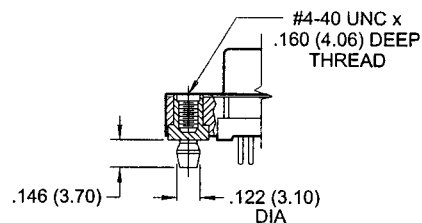
CODE 4
THREADED INSERT/DIP SOLDER PRONG



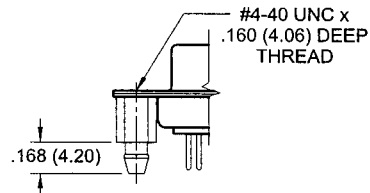
CODE 5
THREADED STANDOFF/DIP SOLDER PRONG



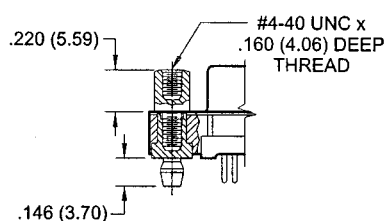
CODE 6 (PLASTIC BODY)
THREADED INSERT/ BOARD LOCK



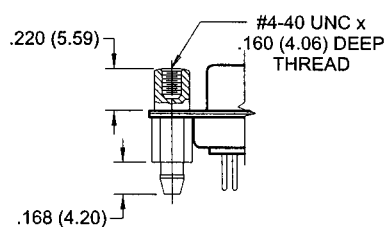
CODE 6 (METAL BODY)
THREADED INSERT/BOARD LOCK



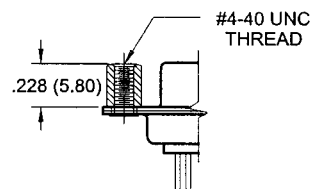
CODE 7 (PLASTIC BODY)
THREADED STANDOFF/BOARD LOCK



CODE 7 (METAL BODY)
THREADED STANDOFF/BOARD LOCK



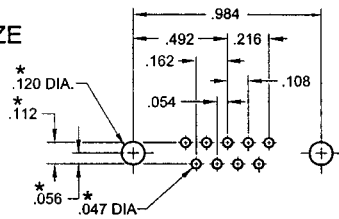
CODE 8
THREADED FIXED STANDOFF



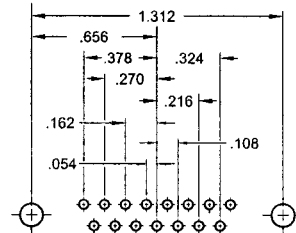
HOLE PATTERN RECOMMENDED

FOR SERIES 619, 620, 621, 622, 627, 628, 629 AND 630

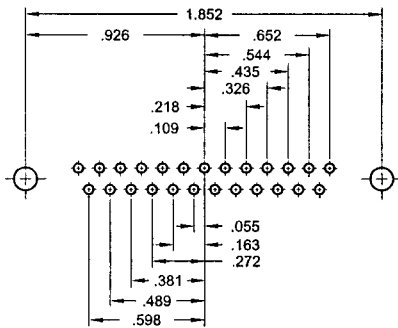
9 SIZE



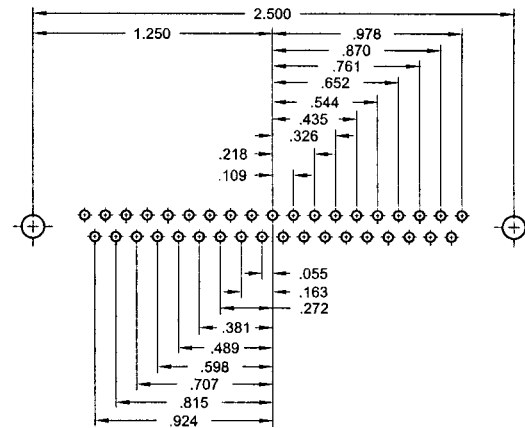
15 SIZE



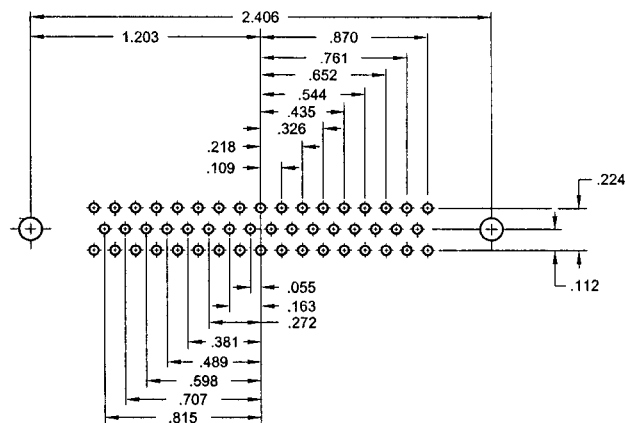
25 SIZE



37 SIZE



50 SIZE

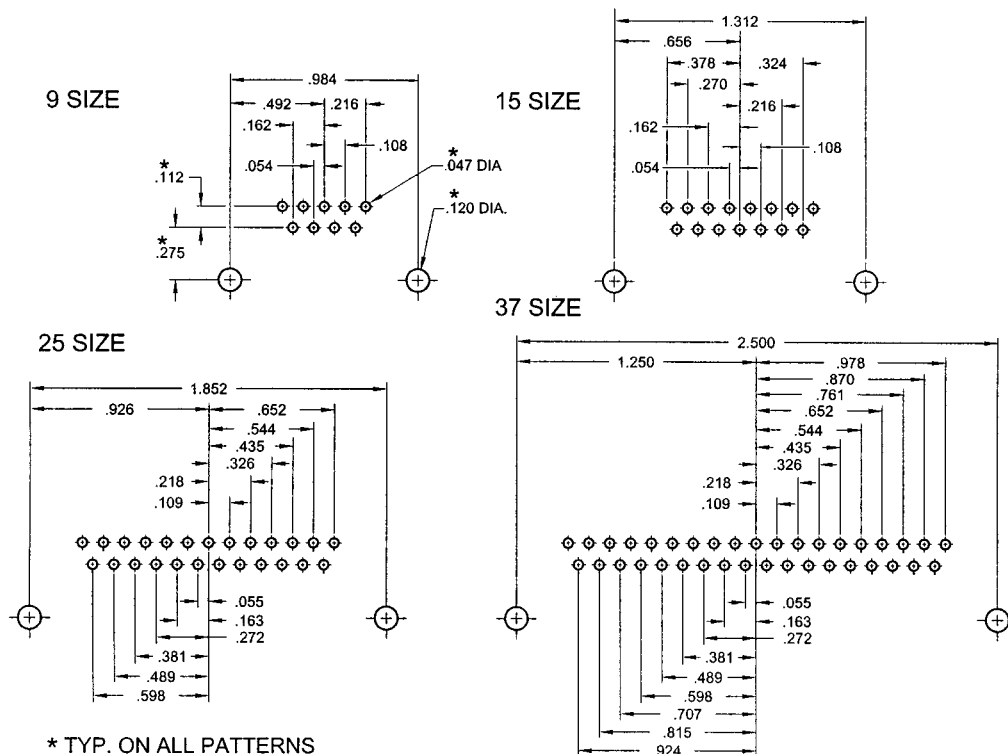


* TYP. ON ALL PATTERNS

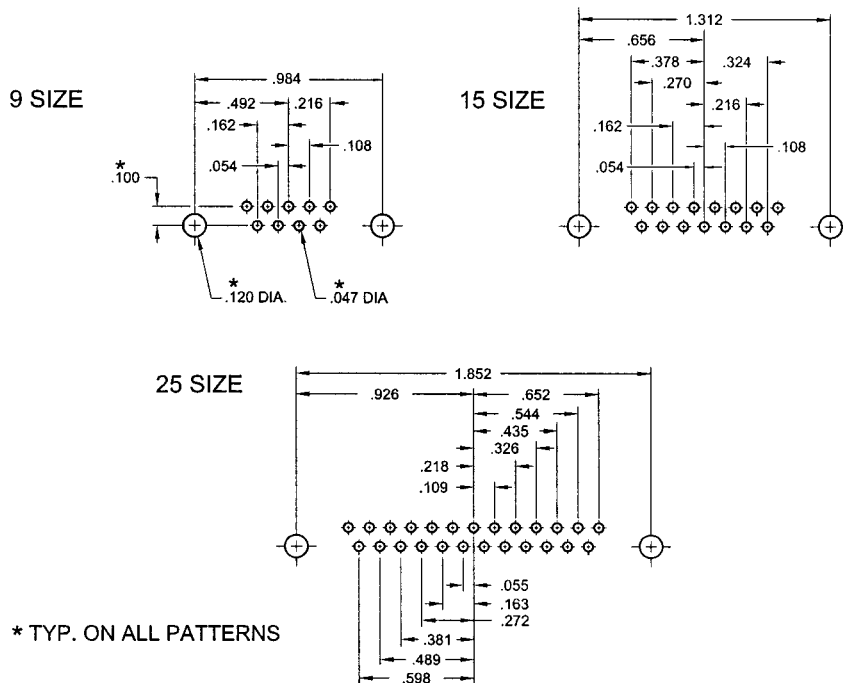
Series 619, 620, 621, 622, 627, 628, 629, 630

HOLE PATTERN RECOMMENDED

FOR SERIES 625 AND 626

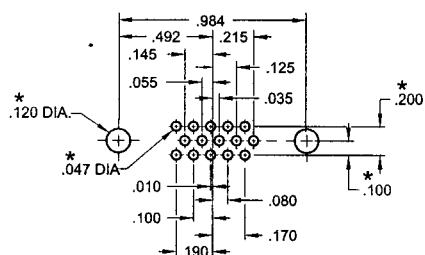


FOR SERIES 623 AND 624



Series 633, 634

15 SIZE

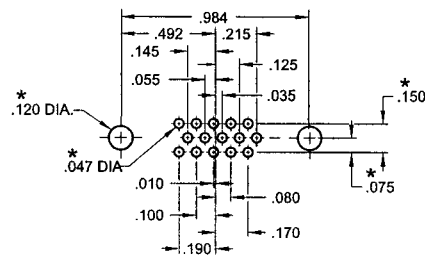


29

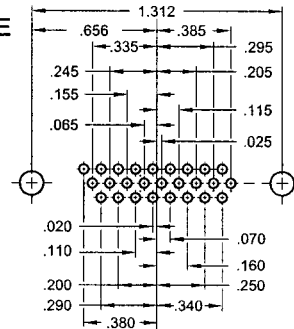
HOLE PATTERN RECOMMENDED

FOR SERIES 632, 637 AND 638
HOLE PATTERN SHOWN ARE FOR 632 AND 638
HOLE PATTERN FOR 637 ARE MIRROR IMAGE

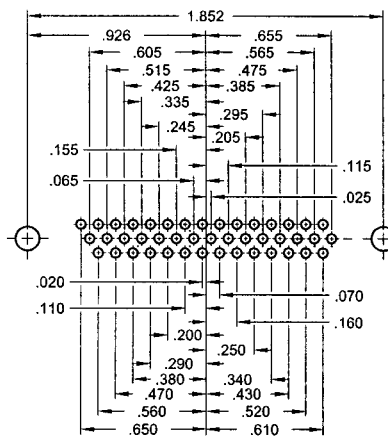
15 SIZE



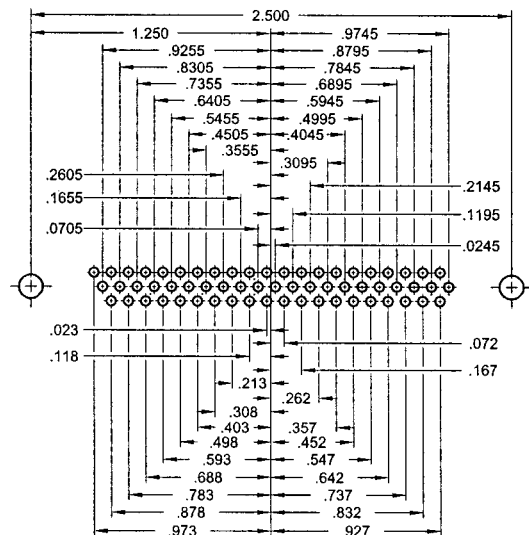
26 SIZE



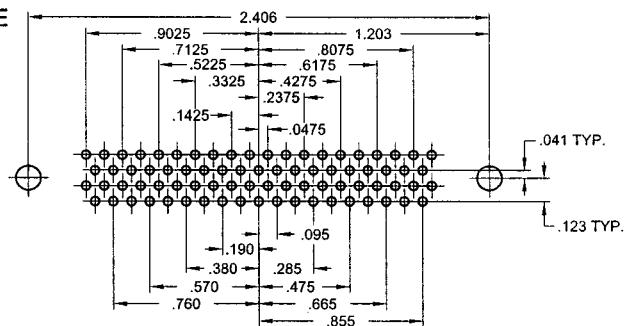
44 SIZE



62 SIZE



78 SIZE



* TYP. ON ALL PATTERNS

INSULATOR MOLDING MATERIALS

EDAC offers a wide range of insulator materials including polyester, polyphenylene sulfide, polycarbonate, liquid crystal polymer and nylon. If a specific material is required to suit your application, please consult with EDAC.

All of the molding materials used by EDAC have excellent mechanical, electrical and thermal properties. Some of the notable differences between the material characteristics are as follows:

- 1 Polyphenylene sulfide and high temperature nylon (6T) are capable of being used in vapour phase or infra-red soldering applications. Frequently these materials are also used in burn-in applications up to 150° C.
- 2 Liquid Crystal Polymer (LCP) is often used to mold extremely fine detailed parts.
- 3 In general, chemical resistance is excellent for all the materials, except polycarbonate. With polycarbonate, chemicals such as amines, aromatic or halogenated hydrocarbons, esters and ketones should be avoided.
- 4 The flammability rating is UL94V-0 for all materials, except for polycarbonate which is rated at UL94V-2.

CONTACT MATERIALS

Contact base materials are either brass phosphor bronze alloy CA-510 or copper, nickel, tin alloy CA-725. These materials have been widely used and accepted in the electronics industry for many years. They offer an excellent blend of electrical, mechanical and corrosion resistance characteristics at a reasonable cost.

Phosphor bronze alloy CA-510, (Federal Specification QQ-B-750, Grade A) consists of 94.8% copper, 5% tin and 0.2% phosphorus.

Copper, nickel, tin alloy CA-725, (ASTM B-122, Copper alloy UNS No. C72500) consists of 88.2% copper, 9.5% nickel and 2.3% tin. This material has the added benefit of remaining solderable in the unplated condition for an extended period of time.

CONTACT FINISH (PLATING & GOLD INLAY)

The standard contact finishes offered include:

- 1 Selective plating - nickel overall followed by gold on the contact mating area and tin/lead alloy on the contact tails.
- 2 Overall plating - gold over nickel or tin/lead alloy.

With this manufacturing flexibility, EDAC can also provide contact finishes to meet specific requirements. Examples of special platings regularly performed include various plating thicknesses and selectively plated gold on both the mating area and the contact tail.

METAL HARDWARE MATERIALS

The majority of metal hardware such as threaded inserts, bushings and actuating screws are nickel-plated brass or steel. Some hardware is available in stainless steel. Consult with EDAC if specific details are required.

UNDERWRITERS' LABORATORY (UL)

Connectors recognized by UL are listed under UL File No. E62838. Consult with EDAC if additional product listings are required.

WIRE DATA

Diameters of wire sizes commonly used with EDAC connectors are summarized below. The actual stranded wire diameter is dependant upon the number of strands and individual strand guide.

ENGINEERING NOTES

SPECIAL VARIATION CONNECTORS

For over 30 years EDAC has manufactured a wide selection of special connectors. In the part numbering system, they are identified as special by the last group of digits in the part number.

Example:

345-015-274-901

SPECIAL VARIATION ID CODE

No.3 - for Series 100 to 438
No.9 - for Series 516 to 746

UNIQUE LISTING CODE

This number is assigned by EDAC. Note that connector part number 345-015-274-900 may have completely different features than the part number in the above example.

Some examples of special connector features previously used in manufacturing include:

- Special contact assembly patterns.
- Polarizing key installed or molded into position.
- Cost saving options such as no part marking.
- Material and plating options.
- Special insulator dimensions (length, width, height, mounting).
- Insulator features such as open card slot ends.
- Special contact bends, boardlock forms, tail lengths.
- Customer part number marking.
- Specific quality requirements or testing.
- Specific control on insertion and withdrawal forces.
- Mounting features such as side holes through card guides.
- Special rack and panel polarization or cover designs.

If you have any unique or unusual connector requirements, discuss them with the specialists at EDAC, where your connector needs can become reality.

ENVIRONMENTAL RESPONSIBILITY

EDAC's products and manufacturing processes are free of ozone depleting substances (CFCs and HCFCs) as listed by the Environmental Protection Agency. In addition, waste water quality management and 3R (reduce, reuse and recycle) programs form part of the EDAC commitment to environmental responsibility.

GENERAL NOTES

- 1 Dimensional drawings are presented using orthographic third angle projection.
- 2 Abbreviations used in this catalog include:

AWG	American Wire Gauge
C	Celsius
CSA	Canadian Standards Association
Dia.	Diameter
EISA	Extended Industry Standard Architecture
ID	Inside Diameter
ISA	Industry Standard Architecture
kN	Kilonewton
kPa	Kilopascal
lbs.	Pounds
MCA	Microchannel Architecture
mm	Millimetres
N	Newton
oz.	Ounce
PC	Printed Circuit
P/N	Part Number
psi	Pounds per square inch
rms	Root mean squared
V AC	Volts, Alternating Current
UL	Underwriters Laboratories
UNC	Unified Coarse
μ"	Microinches
μm	Microns

- 5 EDAC is a licensed user of the connector design technology that permits the use of flat rock tooling for the installation of the compliant pin card edge connectors.
- 6 Every effort has been made to ensure the accuracy of information within this catalog. When changes or corrections are necessary, trade announcements are made to customers, distributors or representatives of EDAC. Readers of this catalog are invited to offer suggestions for improvements to future publications.

ENGINEERING NOTES

PLATING CODE SPECIFICATIONS

	Class I	Class II	Class III
Temperature Rating	-65°C to +150°C	-65°C to +125°C	-55°C to +105°C
Durability Ref. TP09 (IPC 3.4)	500 Cycles	250 Cycles	100 Cycles
Contact Wear Evaluation	5% Salt. Solution for 48 hours	5% Salt Solution for 48 hours	N/A
Contact Resistance Ref. TP06 (IPC 3.1)	10 Milliohms	10 Milliohms	25 Milliohms

THERMAL PROPERTIES OF INSULATOR MOLDING MATERIALS

	Heat Deflection Temperature		Max. Service Temperature	
	At 66 psi	At 264 psi	Inter. use	Cont. use
Nylon	142°F to 510°F	104°F to 500°F	150°F to 375°F	149°F to 326°F
Polycarbonate	275°F to 310°F	260°F to 300°F	250°F to 270°F	220°F to 270°F
Polyester, PET	---	435°F to 450°F	---	---
Polyester, PBT	158°F to 450°F	145°F to 450°F	---	280°F
Polyphenylene Sulfide	500°F to 540°F	285°F to 510°F	450°F to 480°F	360°F to 450°F