

AVX Connector Short Form



Version 8.1

AVX
A KYOCERA GROUP COMPANY

AVX Interconnect

Over 50 years of History as a World Class supplier of high quality connectors and interconnect systems, focusing in particular the mobile communications, automotive, telecommunications, medical and handheld industrial and consumer markets.

As a division of AVX, Elco is committed to providing our customers with a broad range of technologically advanced products. AVX offers the widest range of Passive and Electromechanical components in the Industry. Elco manufacturing facilities include USA, Germany, UK, Japan, China, Mexico, Korea, Singapore and the Czech Republic.

Extensive investment in product and process development, along with experienced personnel at all locations provides customers with standard connectors, along with “state-of-the-art” design capability for custom products and superior levels of customer service and product and applications support.

Listed below are ten key things to know about AVX Interconnect:

- Worldwide AVX is #14 in sales for Interconnect Products
- AVX assumed responsibility for Elco Connectors in 1994
- Interconnect is an important part of AVX's worldwide business
- We have the broadest offering of DIN41612 connectors in the market
- We offer custom insert molding, rubber/silicone seals and integrated seals for Automotive applications
- We are technology leaders in compression style Battery, Board to Board, FFC/FPC and I/O connectors
- In Europe we supply backplanes and cable assemblies
- Fine pitch connector technology includes 0.2mm pitch and 0.4mm “Z” axis height
- We have an extensive line of PCMCIA, CF, SD, ExpressCard, SIM and other Memory Products
- We were the first supplier in the World to get pressfit contacts approved in Automotive applications

NOTICE: Specifications are subject to change without notice. Contact your nearest AVX Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all applications.

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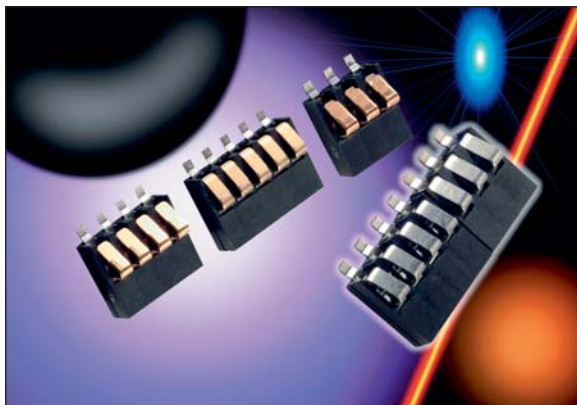
Connector Short Form

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Battery/BTB; Standard

9155 Series



- 3, 4 and 5 positions
- 2.5mm centers, 3 Amp rated
- End-to-End stackable
- 5000 mating cycles, gold plated
- Contact heights from 4.20mm-6.60mm



PART NUMBER FORMAT

00	9155	003	001	006
00 = Standard 58 = Special	Series	Number of Positions	Contact Height	Variation Code - Plating

Battery/BTB; Reduced Size

9155 Series



- 50% volume savings over standard product
- 2.5mm centers, 3 Amp rated
- 2, 3, 4 and 5 positions
- End-to-End stackable
- 5000 mating cycles, gold plated

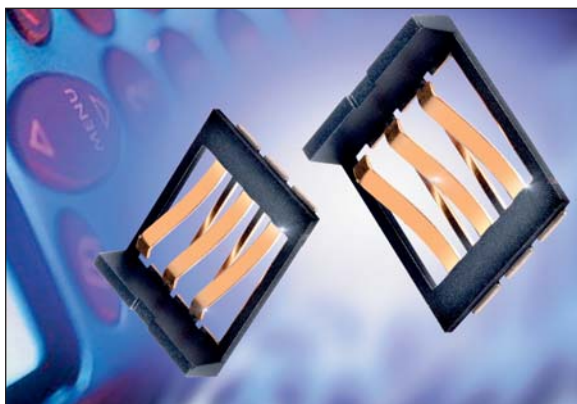


PART NUMBER FORMAT

00	9155	003	201	006
00 = Standard 58 = Special	Series	Number of Positions	Reduced Size	Variation Code - Plating

Battery/BTB; Ultra Low Profile

9155 Series



- 1.3mm compressed "Z" axis height
- 2.5mm centers, 3 Amp rated
- Integral end stop
- Axial or radially engagement
- 5000 mating cycles, gold plated



PART NUMBER FORMAT

00	9155	003	101	006
00 = Standard 58 = Special	Series	Number of Positions	Ultra Low Profile	Variation Code - Plating

Battery/BTB; Right Angle

9155 Series



- 2, 3, 4 and 5 positions
- 3.0mm centers, 3 Amp rated
- End-to-End stackable
- 5000 mating cycles, gold plated
- Contact point 4.61mm above the board



00	9155	003	301	006
00 = Standard 58 = Special	Series	Number of Positions	Contact Height	Variation Code - Plating

Battery/BTB; POGO Pin

9156 Series



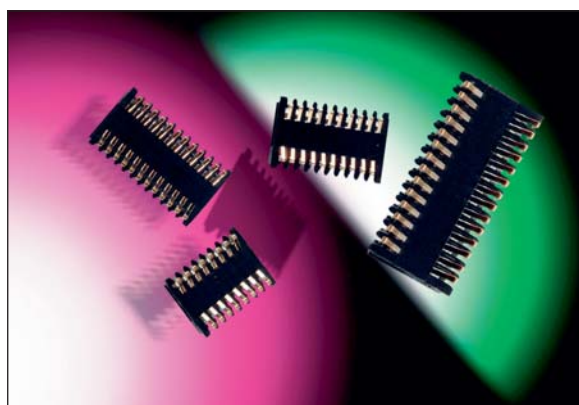
- 100,000 mating cycles
- Spring loaded pins
- 3 Amp current rating
- Optional sizes and heights
- Integral interfacial seals are optional

PART NUMBER FORMAT

58	9156	003	000	XXX
58 = Special	Series	Number of Positions	Contact Style	Variation Number

SOLO™ Stacker – One Piece Compression

9158 Series

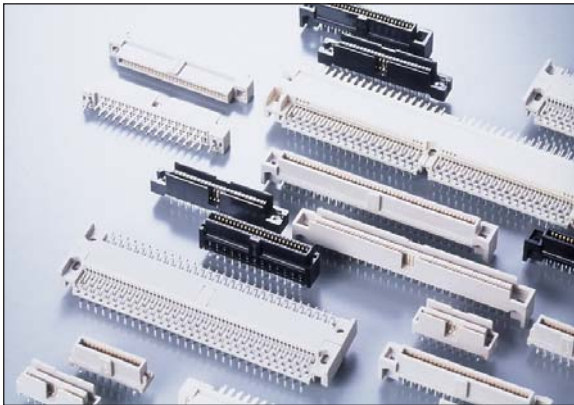


- 1.0mm pitch, 1 Amp rated
- Standard heights from 1.9mm to 3.3mm
- Accommodates wide "Z" axis tolerance range
- Extremely robust in shock and vibration
- Standard sizes range from 16p to 28p



PART NUMBER FORMAT

00	9158	028	030	061
00 = Standard 58 = Special	Series	Number of Positions	Stack Height	Options Plating/ Guide Pins



See Selector Guide page 18

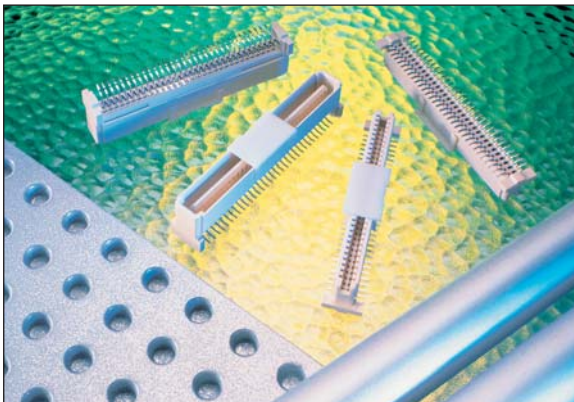
Series 5078: 1.00mm pitch SMT

- 30 - 120 positions
- Parallel stacking and right angle connection



PART NUMBER FORMAT

<u>X0</u>	<u>5078</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX+</u>
10 Plug 20 Receptacle	Series Number	Number of Contacts	Variation Code	Plating Code



See Selector Guide page 18

• IEEE P-1386 Mezzanine Card Standard connector

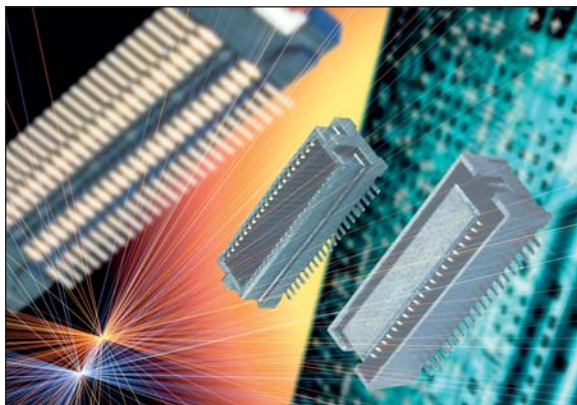
- 1.00mm pitch SMT
- 64 pin stacking connector only for PCI Standard
- 8.00mm-15.00mm Stacking height variation



PART NUMBER FORMAT

<u>X4</u>	<u>5015</u>	<u>064</u>	<u>X</u>	<u>XX</u>	<u>XXX+</u>
14 Plug 24 Receptacle	Series Number	Number of Contacts	0: W/O Boss 1: W Boss	Stacking Height Code	Plating Code

Super Microleaf® Board to Board



See Selector Guide page 18

Series 5602: 0.40mm pitch SMT

- 16 - 80 positions
- Stacking Height range H=1.50mm

Series 5087/5046/5047/5604/5645: 0.50mm pitch SMT

- 30 - 120 positions
- Stacking Height range H=2.00 - 7.00mm

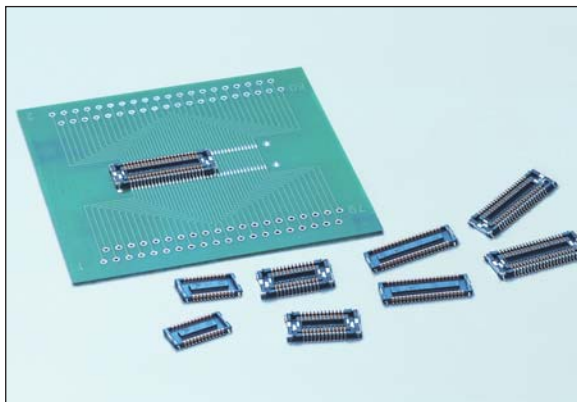


PART NUMBER FORMAT

X4	XXXX	XXX	XXX	XXX+
14 Plug 24 Receptacle	Series Number	Number of Contacts	Variation Code	Plating Code

Super Microleaf® Board to Board

5801 Series



See Selector Guide page 18

- Lowest stack height available, 0.8mm
- “Twin rib” structure eliminates foreign matter in interface
- “Click” locking mechanism creates higher retention force
- Metal locking tab can be used for “ground” or “power”
- Test connector available

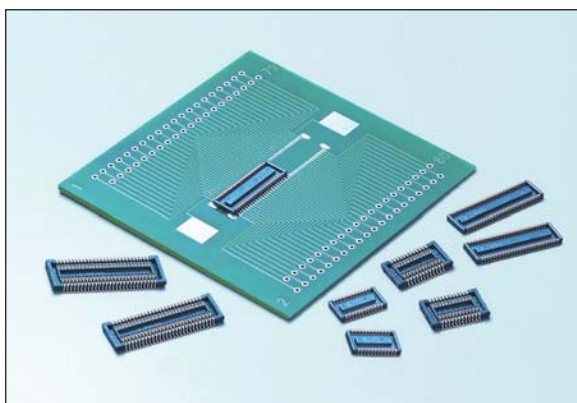


PART NUMBER FORMAT

24	5801	XXX	00X	829+
14 Plug 24 Receptacle	Series	Number of Contacts 10-70P	Variation Code	Plating Code

Super Microleaf® Board to Board

5805 Series



See Selector Guide page 18

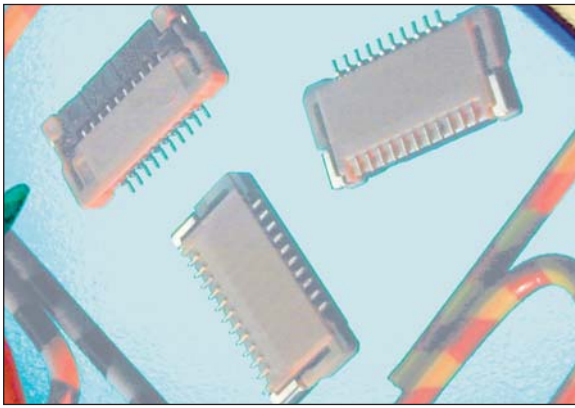
- “Twin rib” structure eliminates foreign matter in interface
- “Click” locking mechanism creates higher retention force
- Test connector available
- Available with and without bosses
- 0.4mm pitch, 1.00mm profile height



PART NUMBER FORMAT

24	5805	XXX	00X	829+
14 Plug 24 Receptacle	Series	Number of Contacts 10-70P	Variation Code	Plating Code

Super Fine Pitch FFC/FPC



See Selector Guide page 17

- 0.50mm, 0.30mm and 0.20mm pitch SMT
- 5-50 pin in 0.50mm pitch and 17-81 pin in 0.30mm pitch capability

Note: Check pin count availability

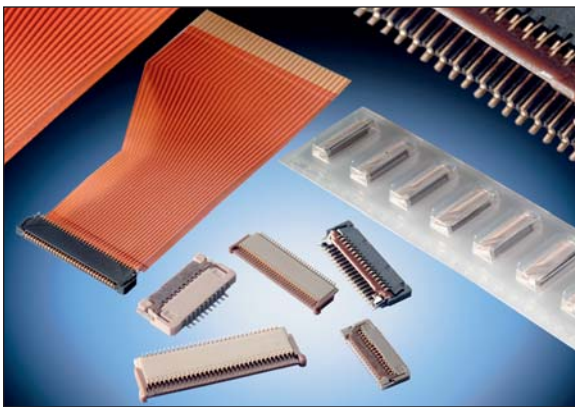
- Flip top or drawer action slider
- Minimize space of PCB layout
- Low height variation available for mobile applications



PART NUMBER FORMAT

<u>04</u>	<u>XXXX</u>	<u>0XX</u>	<u>XXX</u>	<u>XXX+</u>
Tape & Reel	Series Number	Number of Contacts	Variation Code	Plating Code

Fine Pitch FFC/FPC



See Selector Guide page 17

- 1.25mm and 1.00mm pitch
- Through hole and SMT variation
- 5 to 30 pin for standard pin counts
- Vertical and Right Angle type
- LIF (Low Insertion Force) and ZIF (Zero Insertion Force)



PART NUMBER FORMAT

<u>XX</u>	<u>XXXX</u>	<u>XXX</u>	<u>XXX</u>	<u>XXX+</u>
Variation Code	Series Number	Number of Contacts	Variation Code	Variation Code

2 pin Micro IDC Wire to Board

8040 Series



- Lowest profile mating height - 1.4mm
- Secure positive locking function - audible click
- Anti solder wicking design for receptacle
- Compact, space saving design
- AWG #32 wire for plug IDC



PART NUMBER FORMAT

<u>XX</u>	<u>8040</u>	<u>002</u>	<u>XXX</u>	<u>829+</u>
24: Receptacle 97: Plug Wire Harness	Series Number	Variation Code	Variation Code	Plating Code

Note: The plug wire harness will be custom P/N and drawing.

Wire to Board IDC Connector

9175 Series



- 2 & 3 way single row IDC
- 26 and 28 AWG solid or stranded wire
- End to end stackable for multiples over 3 way
- Simple hand assembly tooling
- Standard part RoHS Compliant

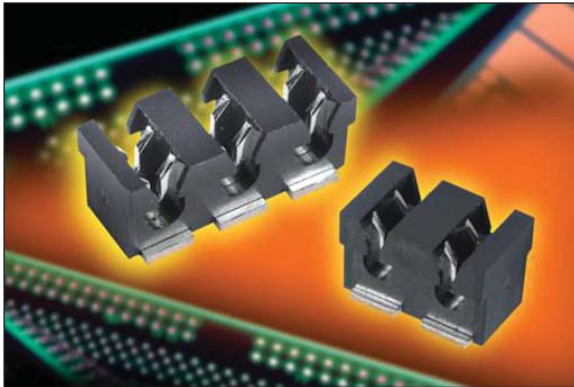


PART NUMBER FORMAT

00	9175	002	001	006
Prefix	Series	Number of Ways	Wire Gauge Size	Plating Option
		002 = 2 003 = 3	Accepted Wire Gauge: 28 Gauge Solid or Stranded 26 Gauge Solid or Stranded	Pure Tin all Over
			Wire Insulation: Min Ø0.70, Max Ø1.00	

Wire to Board IDC Connector

9176 Series



- 2 & 3 way single row IDC
- 18-24 stranded wire
- End to end stackable for multiples over 3 way
- Simple hand assembly tooling
- Standard part RoHS Compliant

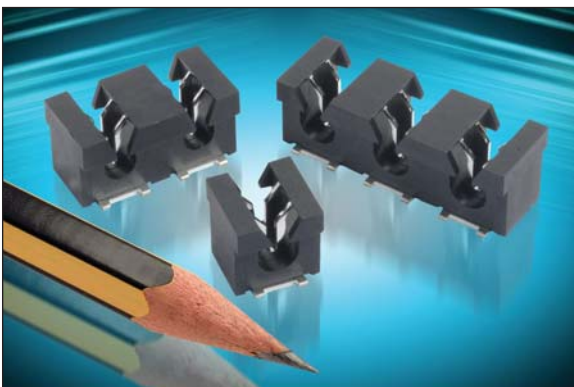


PART NUMBER FORMAT

00	9176	002	001	006
Prefix	Series	Number of Ways	Wire Gauge Size	Plating Option
		002 = 2 003 = 3	Accepted Wire Gauge: 18-24 Gauge Stranded	Pure Tin all Over
			Wire Insulation: Min Ø1.1, Max Ø2.1	

Wire to Board IDC Connector

9177 Series



- 1, 2 & 3 way single row IDC
- 14-20 AWG stranded wire
- End to end stackable for multiples over 3 way
- Mass termination tooling available
- Standard part RoHS Compliant

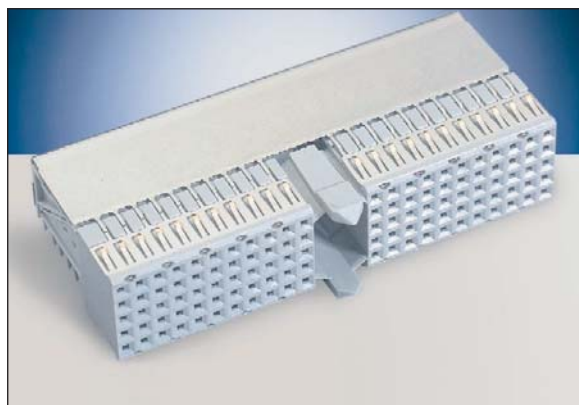


PART NUMBER FORMAT

00	9177	002	001	006
Prefix	Series	Number of Ways	Wire Gauge Size	Plating Option
		001 = 1 002 = 2 003 = 3	Accepted Wire Gauge: 14-20 Gauge Stranded	Pure Tin all Over
			Wire Insulation: Min Ø0.70, Max Ø1.00	

2MM Hard Metric RA Female

7200 Series



See Pressfit Overview pages 19 and 20

- Available in sizes from 55 to 125 signal pins
- For CompactPCI applications (J1-J5)
- Available with or without upper ground return shield
- Designed for gas tight press-fit applications
- Lower ground return shield available

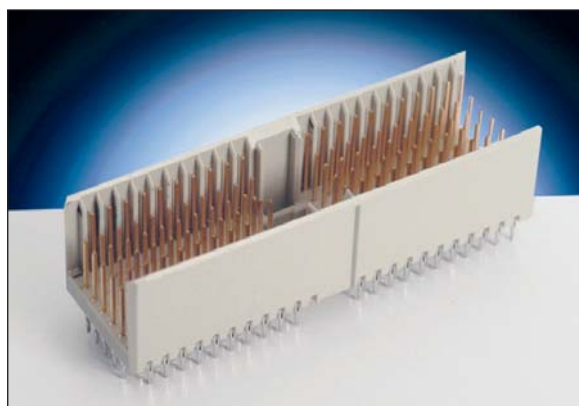


PART NUMBER FORMAT

<u>27</u>	<u>7200</u>	<u>125</u>	<u>202</u>	<u>002</u>
27 = Female	Series	Number of Contacts	Shield	Variation Code - Plating

2MM Hard Metric Male Connectors

7200 Series



See Pressfit Overview pages 19 and 20

- Sizes from 55 to 125 signal pins and 22 to 50 ground pins
- For CompactPCI applications (P1-P5)
- Available in short & long tail versions
- Designed for gas tight press-fit applications
- Fast turnaround on custom pin loading



PART NUMBER FORMAT

<u>17</u>	<u>7200</u>	<u>154</u>	<u>005</u>	<u>002</u>
17 = Male	Series	Number of Contacts	Contact Style	Variation Code - Loading - Plating

2MM Hard Metric RA Female Reduced Cross Talk 7200 Series



See Pressfit Overview pages 19 and 20

- Available in sizes from 55 to 125 pins
- Can accommodate up to 2.5GBs when used with upper & lower shields
- Lower impedance peaks
- Reduced propagation delay



PART NUMBER FORMAT

<u>27</u>	<u>7200</u>	<u>110</u>	<u>203</u>	<u>002</u>
Female	Series	Number of Contacts	Reduced Cross Talk	Plating

High Temperature DIN



See Pressfit Overview pages 19 and 20

- Complete variation range
- Competitive prices
- Selective Contact Loading
- Selective Contact Plating
- Retention clips
- RoHS compliant
- Reflow temperature up to 265°C



PART NUMBER FORMAT

XX	85X7	096	002	025
1X = male 2X = female	8557 = standard 8577 = inverted	Number of positions	Contact Style	Variation Code

DIN41612 – 2 Piece Edgeboard



See Pressfit Overview pages 19 and 20

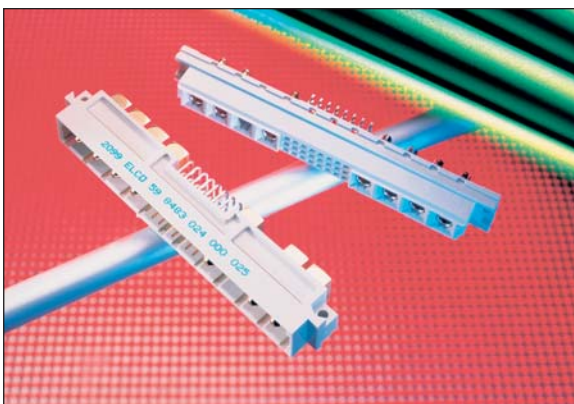
- Broadest offering in the industry
- Styles B,C,D,E,F,G,H,M,Q,R + ½ & ⅓
- Complete High Temperature line
- Low Minimums
- Fast turnaround on specials



PART NUMBER FORMAT

10	8457	096	002	025
1X = Male 2X = Female	Series	Number of positions	Contact Style	Variation Code - Class - Loading - Plating

DIN41612 – Style M



See Pressfit Overview pages 19 and 20

- From 2 to 10 special contact cavities
- From 6 to 78 signal pins
- Uses high power or coax contacts
- Solder and press-fit terminations
- Custom loading available



PART NUMBER FORMAT

10	8483	096	002	025
1X = Male 2X = Female	Series	Number of positions	Contact Style	Variation Code - Class - Loading - Plating

Compression I/O (Standard)

9157 Series



- Patented self cleaning socket contact
- Plastic connector with metal latches
- 19 signal or 15 signal with or without coax
- Optional blind mate docking cradle connector
- 1.5A rated at 10,000 cycles



PART NUMBER FORMAT

10	9157	015	00X	006
10 = Plug 20 = Socket	Series	Number of Positions 15 & 19	Coax Option	Termination

Industrial I/O Connector (Reduced Size)

9257 Series



- Dual row 16p
- Contact geometry provides positive mating feature, eliminating latches
- 1 AMP contact on 1.25mm centers
- 5,000 mating cycles



PART NUMBER FORMAT

10	9257	016	001	003
10 = Plug 20 = Receptacle	Series	Number of Positions	Termination	Variation Code - Plating - Mounting

POGO Pin I/O



- Ruggedized with options for water and dust protection (IP Rating)
- Standard and custom capabilities
- 30,000 to 100,000 mating cycles
- Extremely robust in shock and vibration



PART NUMBER FORMAT

58	9151	012	000	001
58 = Special	Series 9151 9152 9153	Number of Positions	Not Assigned	Variation Code

VARICON® Series 8016 & 8026 – Rack & Panel Connectors



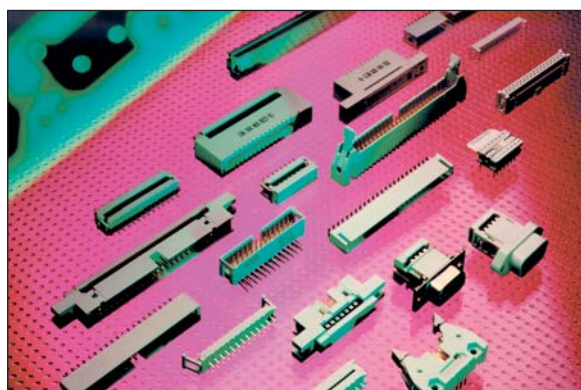
- Two piece Input/Output connectors
- Patented Varicon®, contact system
- Series 8016 available in 20, 38, 56, 90, 120 sizes
- Series 8026 (Mini-Varicon) in 33, 75, 117, 165 sizes
- Crimp, Solder or P.C. board terminations
- Metal covers available for cable protection



PART NUMBER FORMAT

<u>00</u>	<u>8016</u>	<u>056</u>	<u>000</u>	<u>635</u>
Connector	Series	Number of positions	Contact Style	Variation Code

Insulation Displacement Connectors (IDC)



- Available in: Sockets, Headers, Card Edge, Plug
- From 10 to 64 positions
- Low profile & Standard headers, latches available
- Selective plating in 10µ & 30µ Au over Ni
- Industry Standard



PART NUMBER FORMAT

<u>00</u>	<u>8290</u>	<u>016</u>	<u>000</u>	<u>00</u>	<u>0</u>
Connector Code Prefix	Series	Number of contacts	Depends on series		

RF Shield Lock Contact

8069 Series



- Designed for RF Shielding
- 1.8mm and 3.0mm height available
- Applicable to 0.2mm shield case thickness
- Two locking point secure holding feature
- Easy removal of shield case

Note: We do not produce shield case.



PART NUMBER FORMAT

<u>04</u>	<u>8069</u>	<u>000</u>	<u>X00</u>	<u>800+</u>
Tape & Reel	Series Number	Not Assigned	Variation Code	Plating Code



- Accepts standard Micro SIM Cards
- 6 position, 0.5A rated
- 5000 mating cycles, gold plated
- High temperature SMT materials
- Integral guide rails



PART NUMBER FORMAT

00	9162	006	206	175
00 = Standard 58 = Special	Series	Number of Positions	Foot Print	Height

Micro SIM Card Holder (Push/Push)

5036 Series

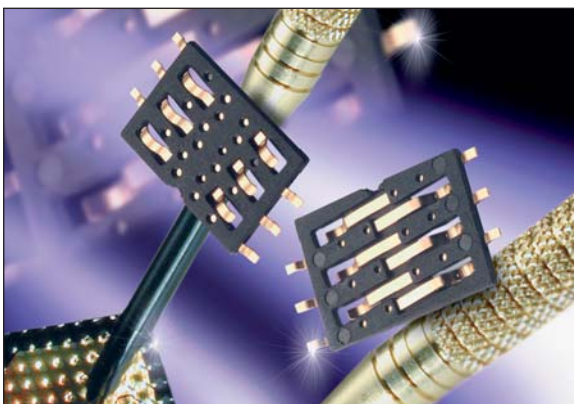


- Series 5036 Micro SIM Standard card holder
- User friendly Push/Push ejector
- Metal frame shielding from ESD/EMI
- 6 pin with slide lock and switch variation available
Part Number: 05 5036 006 102 862
- 6 pin with Card detect variation available
Part Number: 04 5036 006 100 862



SIM Card Reader Block

9162 Series



- Accepts full ISO and Micro SIM Cards
- Three heights starting at 0.8mm
- 6 position, 0.5A rated
- 5000 mating cycles, gold plated
- High temperature SMT materials

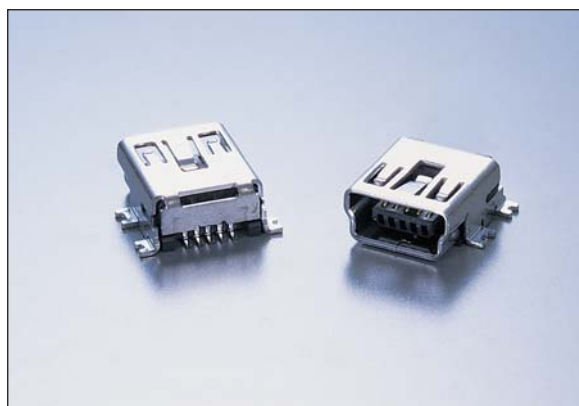


PART NUMBER FORMAT

00	9162	006	006	080
00 = Standard 58 = Special	Series	Number of Positions	Profile	Height

5141 Mini-USB Type B Receptacle Connector

5141 Series



- Improved rear shell for EMI shielding
- Reduced mounting area
- Pre-loaded contacts
- High Contact pressure
- Interface contamination removed by wiping contacts

PART NUMBER FORMAT

24	5141	005	000	863+
14 Plug 24 Receptacle	Series	Number of Contacts	Variation Code	Plating Code



SD & Mini-SD Memory Card Header



- Standard SD (9 pin) & Mini-SD (11 pin)
- Series 5738 push/push metal shield SD
- Series 5138 push/push metal shell micro-SD
- Series 5338 push/push metal shield mini-SD
- Tail style, Normal/Reverse key variation available (5738)

PART NUMBER FORMAT

14	XXXX	XXX	XXX	XXX+
Tape & Reel	Series Number	Number of Contacts	Variation Code	Plating Code



9185 ExpressCard Header

9185 Series



- Retention brackets secure to PCB
- Location bosses for PCB placement during reflow
- SIL contacts for easy soldering and inspection
- Conforms to PClexpress standard
- Mounting frame/rails and push/push action available

PART NUMBER FORMAT

12	9185	034	000	001
Kit	Series	034 = 34mm 054 = 54mm	Variation Code	Variation Code



Compact Flash Memory Card Header



- 50 pin Compact Flash Header and Ejector
- Series 5610 Type I SMT Header
- Series 5620 Type II SMT Header
- Normal & Reverse key, Stand-Off (2.2mm) available
- Ejector variation available

PART NUMBER FORMAT



XX	XXXX	XXX	XXX	XXX+
31: Header 30: Ejector 2x: Receptacle 10: Card Kit	Series Number	Number of Contacts	Variation Code	Plating Code

PCMCIA Header



- PCMCIA Type I,II,III Header & Ejector
- Series 5027 Single (68 pin) SMT Header & Ejector
- Series 5025 Single/Dual Through hole Header & Ejector
- Keying, Stand off, Ejector option available

PART NUMBER FORMAT



XX	XXXX	XXX	XXX	XXX+
Style	Series Number	Number of Contacts	Variation Code	Plating Code

S.O. DIMM / Mini-PCI



- Series 6401, JEDEC S.O DIMM 72p, RA SMT
- Series 6402, JEDEC S.O DIMM 144p, RA SMT
- Series 6403, JEDEC S.O DIMM 144p, Straight
- Series 6405, PCI-CIG Mini PCI Type III 124p, RA
- Height variation available for Right Angle type

PART NUMBER FORMAT



29	XXXX	XXX	XXX	XXX+
Tray Package	Series Number	Number of Contacts	Variation Code	Plating Code

9186/9187 PCI ExpressCard Kit



- 34 and 54mm kits available
- Maximum PCB real estate
- Covers provide excellent RF shielding
- Easy to assemble kit
- Custom plastic extensions

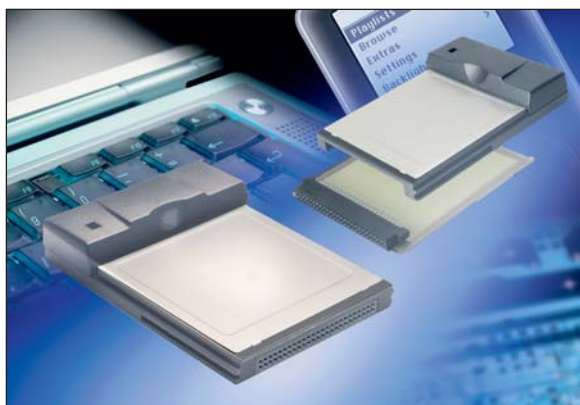


PART NUMBER FORMAT

30	XXXX	6XXX	0	X	002
Part Number	9186 = 34 way 9187 = 54 way	001 = Extended Kit	0 - 0.20 offset	0 covers w/o insulating film 1 covers with insulating film	Packaging Tape & Reel

Extended Compact Flash Type II Kit

9181 Series



- Standard plastic extensions available
- Unique tab feature enhances rigidity
- Multiple PCB offsets
- Custom options



PART NUMBER FORMAT

58	9181	0000	00	018
Custom	Series	Not Assigned	Not Assigned	Sequential

Frameless PCMCIA Card Kit

9180 Series



- Greatest PCB board spacing available
- Simple snap together design
- Standard and custom extensions
- Excellent RF shielding
- Card bus and SIM options



PART NUMBER FORMAT

30	9180	6	XXX	02	002
30 = 5 Volt 31 = 3.3 Volt	Series	Gold on contact area, pure tin on tail	Input Output	68p Connector	Packaging

PCI ExpressCard Edge

6325 Series



- Available Sizes 36, 64, 98, 164 contacts
- 2.3mm & 3.0mm tail lengths
- Molded polarization key to prevent misalignment
- Ejector Latch (size 164 only)
- Tails are offset to form 4 rows on a 2.00mm pitch
- Conforms to PCI Express specification

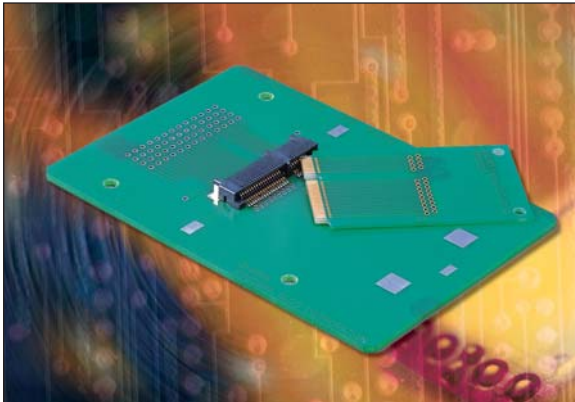
PART NUMBER FORMAT

20	6325	036	002	006
Connector Code Prefix	Series	Number of contacts	Tail Length	Plating Gold over nickel, pure tin on tails



Mini PCI Express

6407 Series



- Complies with Mini PCI Express Standard
- Next Generation of Mini PCI Express Type 3 connector
- Used for WWAN, WLAN (802.11) for Notebook PC or wireless router
- Optional location boss for alignment
- Drop in to the recommended layout of PCI Express MiniCard Standard

PART NUMBER FORMAT

24	6407	052	00X	888+
Connector Code Prefix	Series	Number of Contacts	Variation Code	Plating Code



Automotive Connectors



- Specializing in custom electronic connectors
- Support all automotive electronic applications
 - Control Systems: Engine, ABS, Chassis
 - Safety/Security Systems: Airbag, Door Locking
 - Cockpit Systems: Information, Comfort, Climate
- Advanced component technology
 - Contacts: Press-Fit, Lead frames, Wire, Compression
 - Molding: Insert, Co-Polymer, Encapsulation, LIM
 - Assembly: Short Run, Full Automation
- Design services: CAD, MFA, FEA
- Qualifications: ISO, QS, TS

FPC/FFC Connectors

mm (inches)

Pitch	Series	Profile Height	Cable Connection	Contact Location	PC Board Mounting Method	Rated Current (AC/DC) (Per one contact)
0.2 (0.008)	6246	1.85 (0.073)	ZIF/Right Angle	Dual faced	SMT	0.2A
0.3 (0.012)	6295	0.9 (0.035)	ZIF/Right Angle	Bottom	SMT	0.2A
	6296	1.0 (0.039)	ZIF/Right Angle	Bottom	SMT	0.2A
	6285	1.1 (0.043)	ZIF/Right Angle	Bottom	SMT	0.2A
	6281	1.25 (0.049)	ZIF/Right Angle	Bottom	SMT	0.2A
	6267	1.8 (0.071)	ZIF/Right Angle	Bottom	SMT	0.2A
0.4 (0.016)	6286	3.5 (0.138)	ZIF/Right Angle	Bottom	SMT	0.3A
0.5 (0.020)	6299	0.9 (0.035)	ZIF/Right Angle	Bottom	SMT	0.4A
	6277	0.9 (0.035)	ZIF/Right Angle	Dual	SMT	0.4A
	6298	0.9 (0.035)	ZIF/Right Angle	Bottom	SMT	0.4A
	6250	0.9 (0.035)	ZIF/Right Angle	Bottom	SMT	0.4A
	6252	0.9 (0.035)	ZIF/Right Angle	Top	SMT	0.4A
	6270	0.9 (0.035)	ZIF/Right Angle	Bottom	SMT	0.4A
	6272	0.9 (0.035)	ZIF/Right Angle	Top	SMT	0.4A
	6238	1.1 (0.043)	ZIF/Right Angle	Bottom	SMT	0.4A
	6249	1.2 (0.047)	ZIF/Right Angle	Bottom	SMT	0.4A
	6292	1.2 (0.047)	ZIF/Right Angle	Top	SMT	0.4A
	6254	1.2 (0.047)	LIF/Right Angle	Dual	SMT	0.4A
	6284	1.5 (0.059)	LIF/Right Angle	Dual	SMT	0.4A
	6239	1.5 (0.059)	ZIF/Right Angle	Bottom	SMT	0.4A
	6269	1.5 (0.059)	ZIF/Right Angle	Bottom	SMT	5mA/0.4A
	6240	2.0 (0.079)	ZIF/Right Angle	Bottom	SMT	0.4A
	6222	2.0 (0.079)	LIF/Right Angle	Bottom	SMT	0.4A
	6223	2.0 (0.079)	LIF/Right Angle	Top	SMT	0.4A
	6210	2.0 (0.079)	ZIF/Right Angle	Bottom	SMT	0.4A
	6212	2.0 (0.079)	ZIF/Right Angle	Top	SMT	0.4A
	6260	2.0 (0.079)	ZIF/Right Angle	Bottom	SMT	5mA/0.4A
	6262	2.0 (0.079)	ZIF/Right Angle	Top	SMT	5mA/0.4A
	6266	3.5 (0.138)	LIF/Vertical	Dual	SMT	0.4A
	6214	4.1 (0.161)	ZIF/Vertical	Single	SMT	0.4A
	6274	4.4 (0.173)	ZIF/Vertical	Single	SMT	0.4A
	6244	4.1 (0.161)	LIF/Vertical	Single	SMT	0.4A
1.0 (0.039)	6237	2.0 (0.079)	ZIF/Right Angle	Bottom	SMT	0.5A
	6227	2.0 (0.079)	LIF/Right Angle	Dual	SMT	1.0A
	6200	2.9 (0.114)	ZIF/Right Angle	Bottom	PTH	1.0A
					SMT	
	6224	2.9 (0.114)	ZIF/Right Angle	Top	SMT	1.0A
	6232	3.0 (0.118)	LIF/Right Angle	Top	PTH	0.5A
				Bottom	PTH	
				Top	SMT	
				Bottom	SMT	
		5.1 (0.201)	LIF/Vertical	Single	SMT	1.0A
		5.5 (0.217)	LIF/Vertical	Single	PTH	
	6226	3.5 (0.138)	LIF/Vertical	Dual	SMT	1.0A
	6208	5.0/5.2/5.5 (0.197/0.205/0.217)	ZIF/Vertical	Single	PTH	1.0A
					SMT	
	6231	5.5 (0.217)	LIF/Vertical	Single	SMT	1.0A
	6248	5.5 (0.217)	ZIF/Vertical	Single	SMT	0.5A
	6229	5.7 (0.224)	ZIF/Vertical	Single	PTH	1.0A
					SMT	
1.25 (0.049)	6207	3.5 (0.138)	LIF/Right Angle	Dual	SMT	1.0A
		7.0 (0.276)	LIF/Vertical			
	8370	4.2 (0.165)	LIF/Right Angle	Dual	PTH	1.0A
		7.2 (0.283)	LIF/Vertical			
	6216	4.2 (0.165)	LIF/Right Angle	Top	PTH	1.0A
				Bottom		
	5062	7.0 (0.276)	LIF/Vertical	Single		
	6203	5.0 (0.197)	LIF/Vertical	-	Direct	1.0A
	6205	5.5 (0.217)	LIF/Right Angle	Single	PTH	1.0A
		8.8 (0.346)	ZIF/Vertical	Single	PTH	1.0A

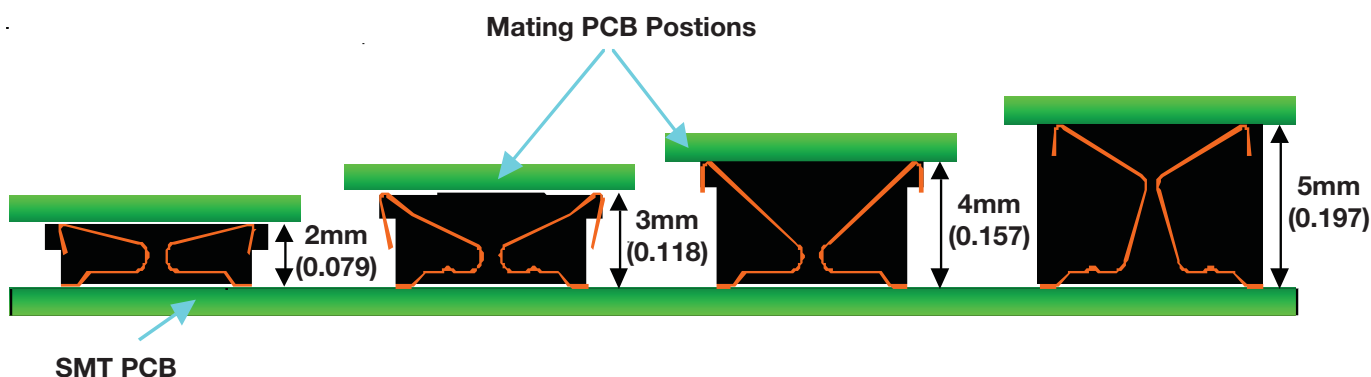
PTH = Plated Through Hole
ZIF = Zero Insertion Force
LIF = Low Insertion Force

Board to Board Connectors – 2 Piece Microleaf®

mm (inches)

Pitch	Series	Stacking Height	Connection Style	With or Without Metal Tab	PC Board Mounting Method	Rated Current (AC/DC) (Per one contact)
0.4 (0.016)	5801	0.8 (0.031)	Vertical-Vertical	With/Without metal tab	SMT	0.4A
	5802	0.8 (0.031)	Vertical/Slim Line	With metal tab Not for grounding	SMT	0.4A
	5605	1.0 (0.039)	Vertical-Vertical	With/Without metal tab	SMT	0.4A
	5805	1.0 (0.039)	Vertical-Vertical	Without metal tab	SMT	0.3A
	5602	1.5 (0.059)	Vertical-Vertical	With/Without metal tab	SMT	0.5A
0.5 (0.020)	5604	1.5 (0.059)	Vertical-Vertical	With/Without metal tab	SMT	0.5A
		2.0 (0.079)				
		2.4 (0.094)				
	5087	2.0 (0.079)	Vertical-Vertical	With/Without metal tab	SMT	0.4A
		2.5 (0.098)				
		3.0 (0.118)				
	5046	3.5 (0.138)	Vertical-Vertical	With/Without metal tab	SMT	0.4A
		4.0 (0.157)				
		4.5 (0.177)				
		5.0 (0.197)				
	5047	7.0 (0.276)	Vertical-Vertical	Without metal tab	SMT	0.4A
	5603	10.0 (0.394)	Vertical-Vertical	With metal tab	SMT	0.4A
	5607	10.0 (0.394)	Vertical-Vertical	With metal tab	SMT	0.4A
	5042	16.0 (0.630)	Vertical-Vertical	With metal tab	SMT	0.5A

Board to Board Connectors – 1 Piece Compression



Mating Height	Standard Positions					Special Positions					
	16	20	24	28	32	4	18	28	30	34	40
2mm	X	X	X	X	X					X	
3mm	X	X	X	X	X						
4mm						X	X	X			X
5mm									X		

Other sizes available on request.

PCI Mezzanine Card Connectors

Stacking Height Code	8.0mm	9.0mm	10.0mm	11.0mm	12.0mm	13.0mm	14.0mm	15.0mm
Plug	00	01	02	00	01	02	01	02
Receptacle	00	00	00	03	03	03	05	05

Press-Fit Technology Overview

VARIPIN®

Varipin® is the flexible press-fit contact used by AVX for many years. The contact zone and in particular the mechanical aspects guarantee an equal force on the complete contact length and prevent 'eye of the needle' cracking, or the contact itself damaging the PCB.

VARIPIN® SPECIFICATION

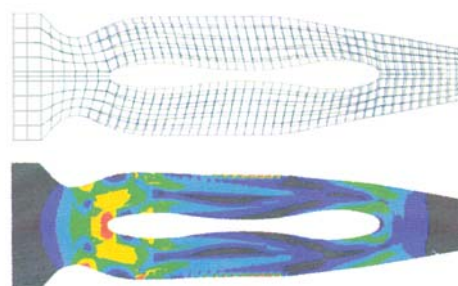
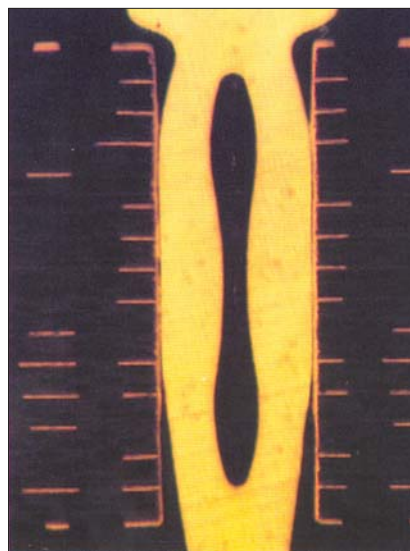
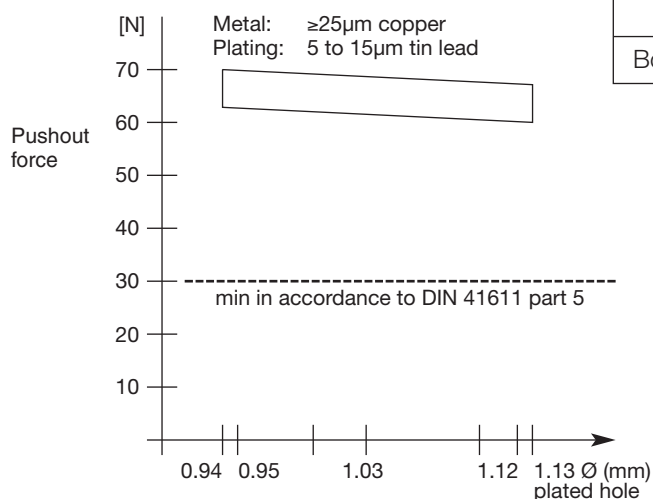
VARIPIN® conforms to the required features of DIN 41611 (DIN IEC 48 (Sec.) 334) and the PCB specification is available with the following advantages:

- 100% flexible press-fit shank
- exchange of contacts up to 3 times
- applicable for pc board thickness ≥ 1.6 mm
- vibration and corrosion safe connection
- optional plating materials
- low transition resistance

INSERTION FORCES

During the optimization of the press-in area a special core was created for compliance with the maximum press-in (250N) and minimum push-out (30N) forces specified in DIN 41611.

In the diagram to the right the behavior of the press-in- and push-out forces in relation to the diameter of the hole as well as the diagonal of the press-in pin (1.24 mm) are shown.



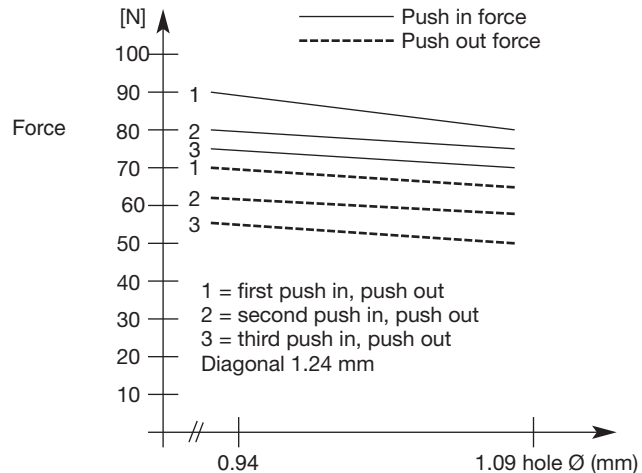
HOLE SPECIFICATION

	DIN 41612	2mm
Drilled hole	1.15 mm	$0.7\text{mm} \pm 0.025$
Plated hole	0.94 mm to 1.09 mm	$0.6\text{mm} \pm 0.05$
Copper plating	25 to 55 micron	25 to 50 micron
Tin plating	5 to 15 micron (max 40 micron available if finished hole is 0.94 mm)	4 to 10 micron
Board thickness	1.6 to 3.2 mm or greater	1.4mm min

Press-Fit Technology Overview

INSERTION FORCE AFTER THE THIRD EXCHANGE OF A CONTACT

Due to the very low strain on the PCB hole an exchange of pins in one hole is possible up to 3 times without a significant loss of retaining force. Contacts can be exchanged at any position within a press-in connection.



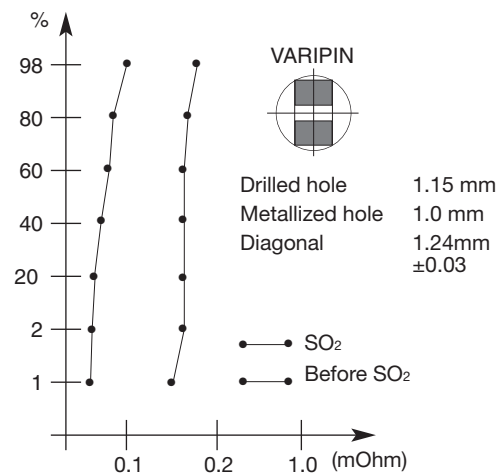
TRANSITION RESISTANCE

A significant advantage of the high push-out force and the large contact area (contact length min 1.4 mm or 2 mm for a 3.2 mm PCB) is the very low transition resistance ($\leq 0.2 \text{ m}\Omega$) as well as the vibration and corrosion free connection.

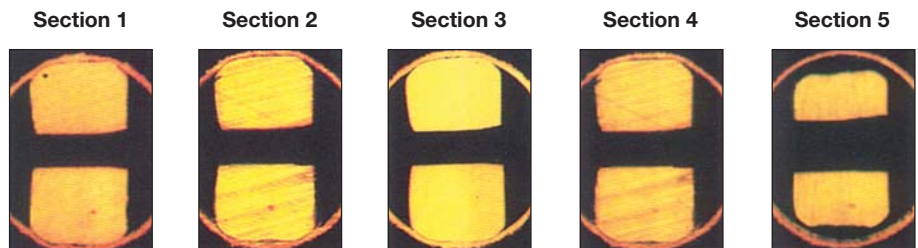
Given that the transition resistance between male and female connectors in accordance with DIN 41611 can be up to 20 m Ω , the transition resistance of the press-in connection can be virtually neglected.

AVX can guarantee a secure connection within a frequency range of 10 - 2000 Hz at 20 G in accordance with IEC 48 (sec) 334.

Transition Resistance before and after SO₂ Test



In the right hand picture we show the contact length of the VARIPIN into an 3.2 mm PC board. These show a large connection surface from section 1 to section 4 which corresponds to a contact length of more than 2 mm.



PRESS-FIT INSTALLATION METHODS

Right angle headers and receptacle connectors require a press-in tool.

Vertical headers and receptacles do not require a special tool. They are installed using the "Flat Rock" method. Flat Rock

termination involves the use of a flat metal plate, slightly larger than the length and width of the connector. Installed in a press, the plate pushes down on the connector in a uniform manner until the connector is properly seated.

FFC, BATTERY, SIM, WIRE TO BOARD AND I/O CONNECTORS

AVX “quick connect” is a fast turnaround sample program, covering FFC, Battery, SIM and Input/Output connectors. Design Engineers can speed their development cycle by selecting up to 10 samples of an item from our list of over 200 key part numbers. We will dispatch these parts within 48 hours. To select a part visit <https://www.avx.com/QCRequest.asp> or contact your local sales office.

SERIES AVAILABLE FOR SAMPLES ON QUICK CONNECT

Series	Description
5036	Push-Push SIM
6200	FFC/FPC, 1.0mm RA ZIF, Bottom Contact, 2.9mm Profile
6208	FFC/FPC, 1.0mm ST ZIF, Vertical Contact
6212	FFC/FPC, 0.5mm RA ZIF, Top Contact, 2.0mm Profile
6214	FFC/FPC, 0.5mm ST ZIF, Vertical Contact, 4.1mm Profile
6222	FFC/FPC, 0.5mm RA LIF, Right Angle Contact, 2.0mm Profile
6223	FFC/FPC, 0.5mm RA LIF, Right Angle Contact, 2.0mm Profile
6224	FFC/FPC, 1.0mm RA LIF, Right Angle Contact, 2.9mm Profile
6232	FFC/FPC, 1.0mm RA/ST ZIF
6239	FFC/FPC, 0.5mm RA ZIF, 1.5mm Profile
6244	FFC/FPC, 0.5mm ST LIF, 4.1mm Profile
9155	Battery Connectors
9162	Slide-in SIM
9175	Discrete Wire IDC 26-28 AWG
9176	Discrete Wire IDC 18-24 AWG
9177	Discrete Wire IDC 14-20 AWG
9257	I/O Connector, Reduced Size, 16 Position

Please check <https://www.avx.com/QCRequest.asp>
for a complete listing of available part numbers.

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