

AVX **MOBO™** Spring Contact Interconnect Solutions



Version 7.1

AVX
A KYOCERA GROUP COMPANY

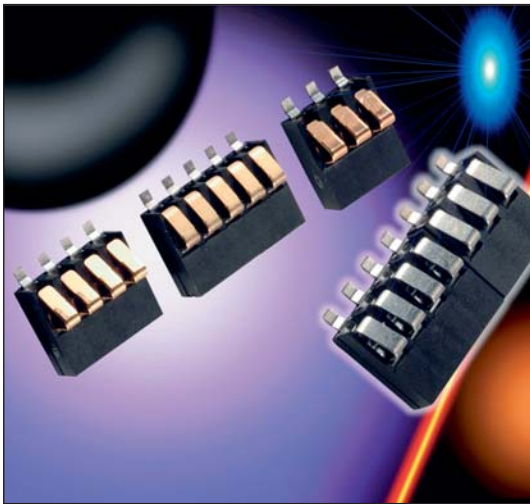
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GENERAL DESCRIPTION

The standard battery connector is specifically designed for mobile equipment. The connectors are available in 3, 4 and 5 contact positions all on a 2.50mm pitch. The insulator height provides a 3mm spacing, with various contact nose heights from 1.20mm to 2.60mm, to provide spacing options to the end user.

All contacts are stamped and are rated to 3A, with Gold plating. Parts are supplied in tape and reel for automatic pick and place. Optional retaining brackets are available to provide greater strength when connected to the PCB.

Whatever your requirements, the 9155 series Battery Connector can also be customized to suit your applications.

APPLICATIONS

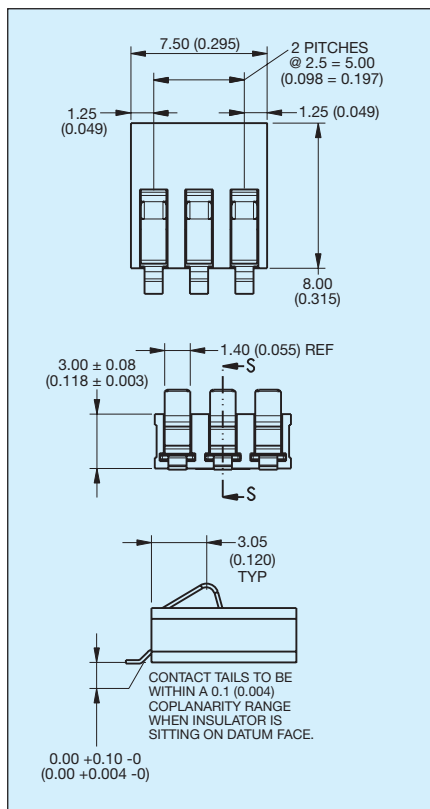
- Mobile Phones
- PDA
- Medical
- PMR
- Industrial

KEY FEATURES AND BENEFITS

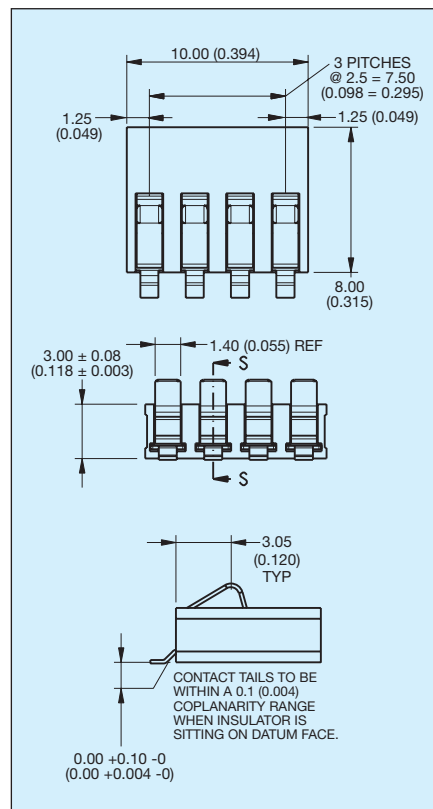
- Suitable for 5000 mechanical cycles.
- Variety of contact heights offered to suit different mechanical designs.
- Connectors can be end to end stackable.
- RoHS Compliant available.



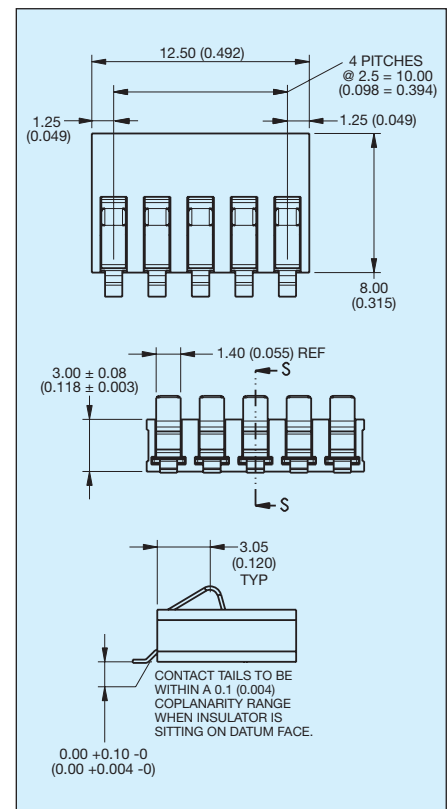
3 Way Battery Connector



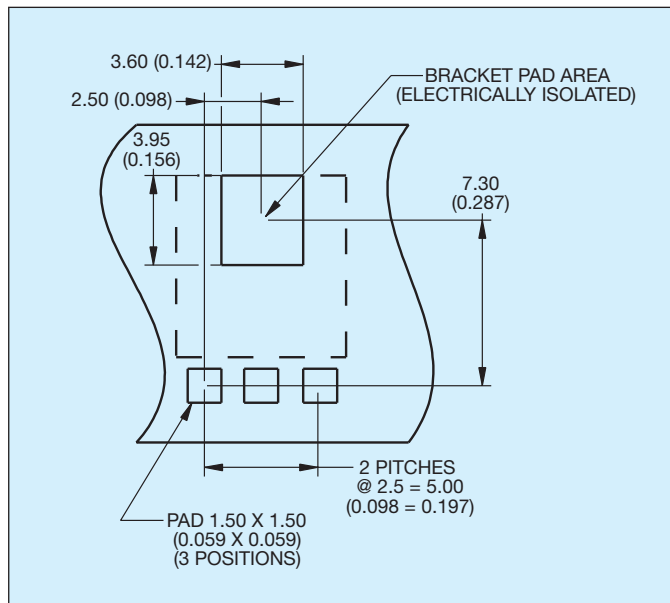
4 Way Battery Connector



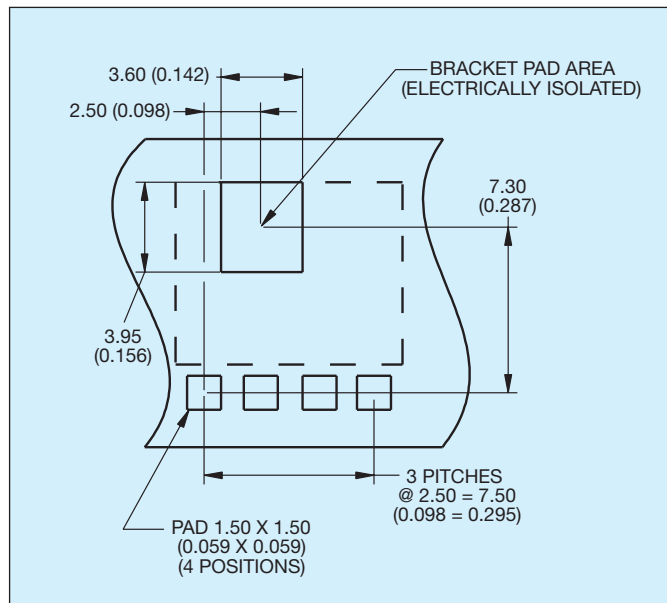
5 Way Battery Connector



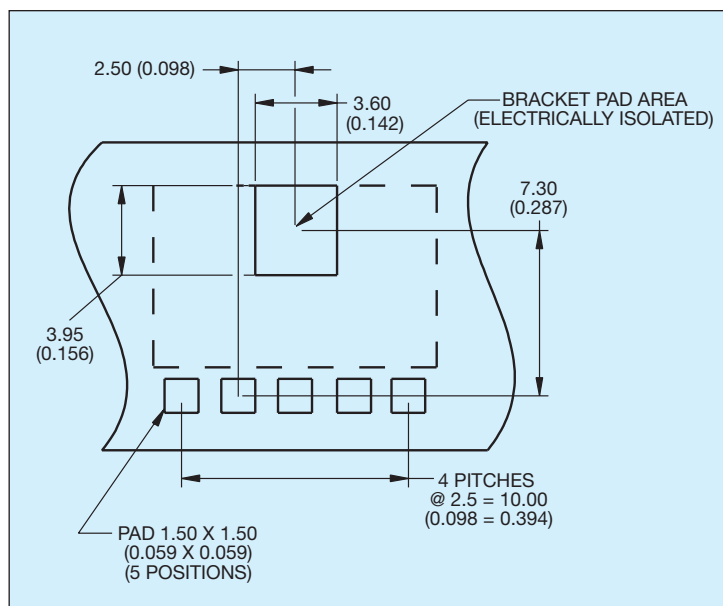
3 Way PCB Board Layout



4 Way PCB Board Layout



5 Way PCB Board Layout



HOW TO ORDER

| 00 | 9155 | 003 | 00 | 1 | 00 | 6 |
|-------------------------------|---------------|-------------------------------|-----------------------------------|---|--------------------------------------|--|
| Prefix | Series | No of Ways | Standard Battery Connector | Contact Height | Bracket | Plating Option |
| 00 = Standard 58 = Special | | 3 = 003 4 = 004 5 = 005 | 00 = Standard Force | 1 = 1.20 (0.047) / 1.50 (0.059) 2 = 1.80 (0.071) / 2.10 (0.083) 3 = 2.30 (0.091) / 2.60 (0.102) | 00 = No Bracket 01 = With Bracket | 6 = 0.4µm Selective Gold, Pure Tin Tail 8 = 0.8µm Selective Gold, Pure Tin Tail |

9155 Size Reduced Battery Connector

GENERAL DESCRIPTION

The newest product in AVX's Interconnect family of battery connectors saves 50% in volume over the initial 9155 series compression connectors as illustrated in the photograph. These connectors are rated at a full 3 amps per contact on 2.5mm centers. Sizes range from 2 positions through 5 positions and are end to end stackable.

APPLICATIONS

- Cellular Phones
- Handheld Devices
- Industrial Modules
- Medical Electronics

KEY FEATURES AND BENEFITS

- 2.4mm insulator height
- 3 amps/contact
- Large SMT mounting area for positive mechanical attachment
- 5k mating cycles
- End-to-end stackable



HOW TO ORDER

00

Prefix

9155

Series

003

No. of Ways

| Code | No. of Ways | Reel Qty | Packing Qty |
|------|-------------|----------|-------------|
| 002 | 2 | 2000 | 2000 |
| 003 | 3 | 2000 | 2000 |
| 004 | 4 | 2000 | 2000 |
| 005 | 5 | 2000 | 2000 |

201

Reduced Size Battery Connector

| Code | Description |
|------|--------------------------------|
| 201 | Reduced Size Battery Connector |

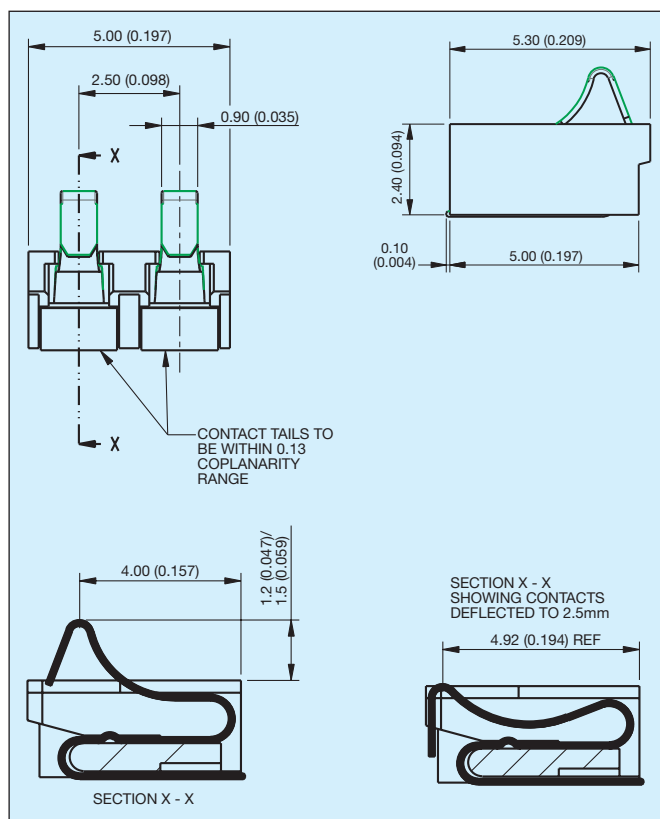
XXX

Plating Option

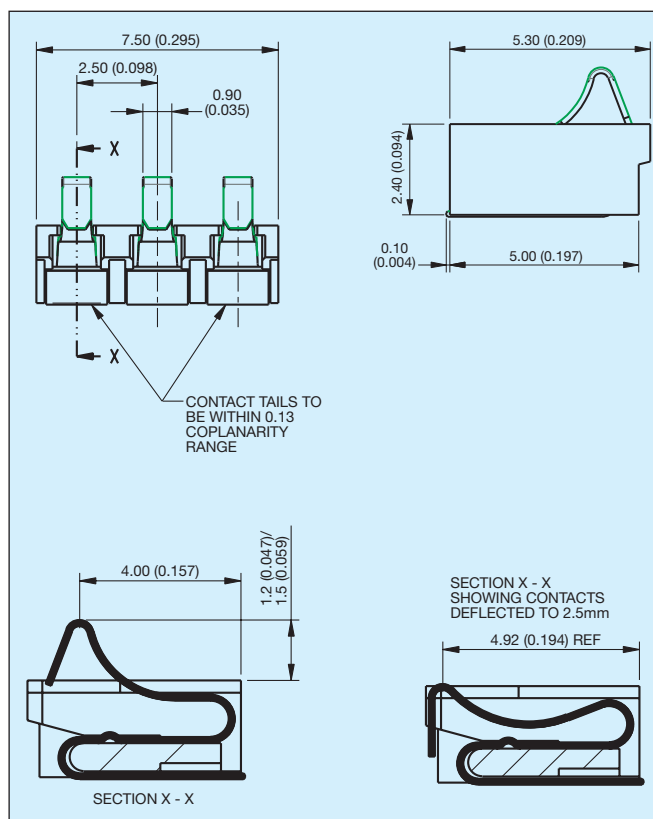
| Code | Description |
|------|-------------------------------------|
| 006 | 0.4µm Selective Gold, Pure Tin Tail |
| 008 | 0.8µm Selective Gold, Pure Tin Tail |

9155 Size Reduced Battery Connector **AVX**

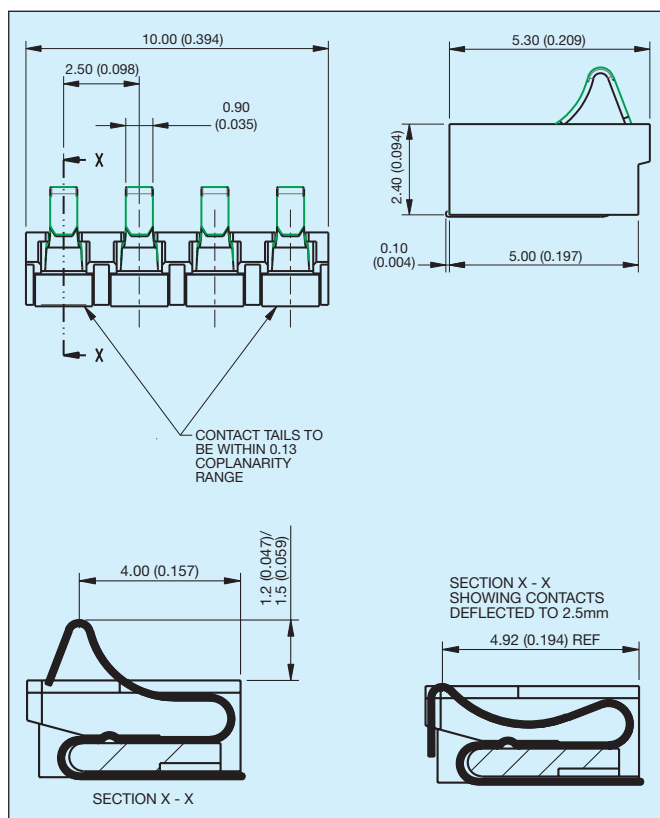
2 Way Reduced Battery Connector



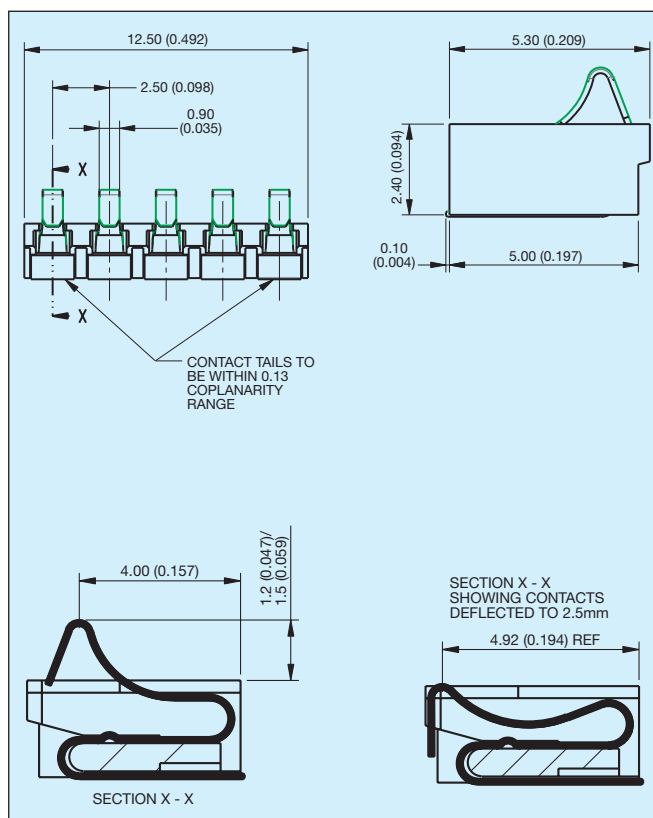
3 Way Reduced Battery Connector



4 Way Reduced Battery Connector

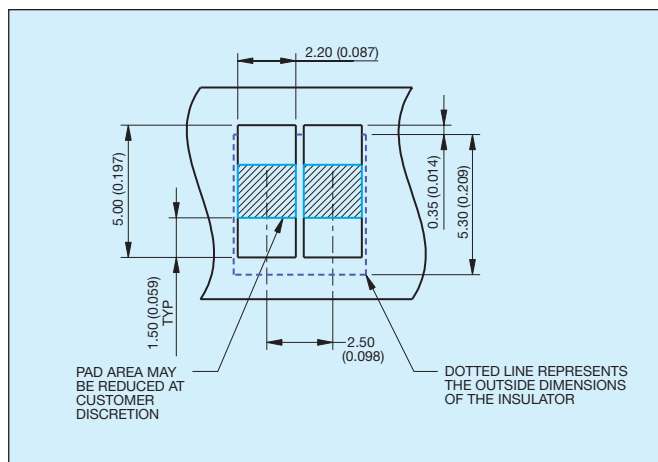


5 Way Reduced Battery Connector

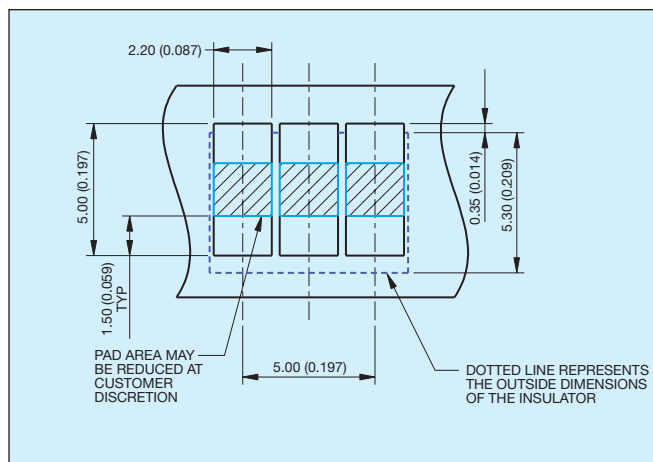


9155 Size Reduced Battery Connector **AVX**

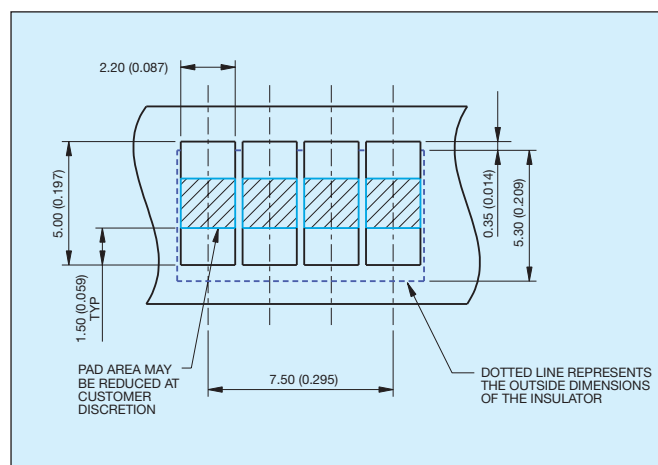
2 Way Reduced Battery Connector PCB Layout



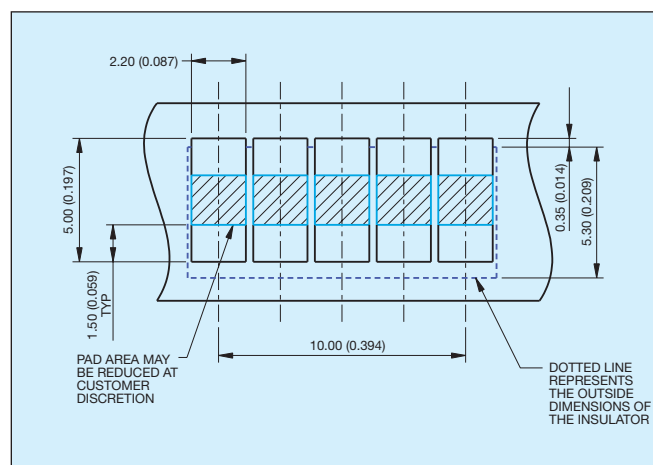
3 Way Reduced Battery Connector PCB Layout



4 Way Reduced Battery Connector PCB Layout



5 Way Reduced Battery Connector PCB Layout



9155 Ultra-Low Profile Battery



GENERAL DESCRIPTION

The AVX Interconnect group has released a new ultra-low profile 3 amp per contact connector for battery pack or slide-in module applications. The compressed "Z" axis height of 1.3mm leads the industry from a profile standpoint. The initial product is in a 2 & 3 position configuration with other sizes expected to follow. The connector has an integral end block to act as a mechanical stop.

APPLICATIONS

- Cellular Phones
- Handheld Devices
- Industrial Modules
- Medical Electronics

KEY FEATURES AND BENEFITS

- Ultra-Low Profile
- 3 amps/contact
- Integral End Stop
- 5k mating cycles



HOW TO ORDER

00



Prefix

9155



Series

003



No. of Ways

| Code | No. of Ways | Qty. Per Reel |
|------|-------------|---------------|
| 002 | 2 | 1500 |
| 003 | 3 | 1200 |

101



Low Profile Battery Connector

| Code | Description | Operating Height |
|------|-------------------------------|------------------|
| 101 | Low Profile Battery Connector | 1.30 (0.051) |

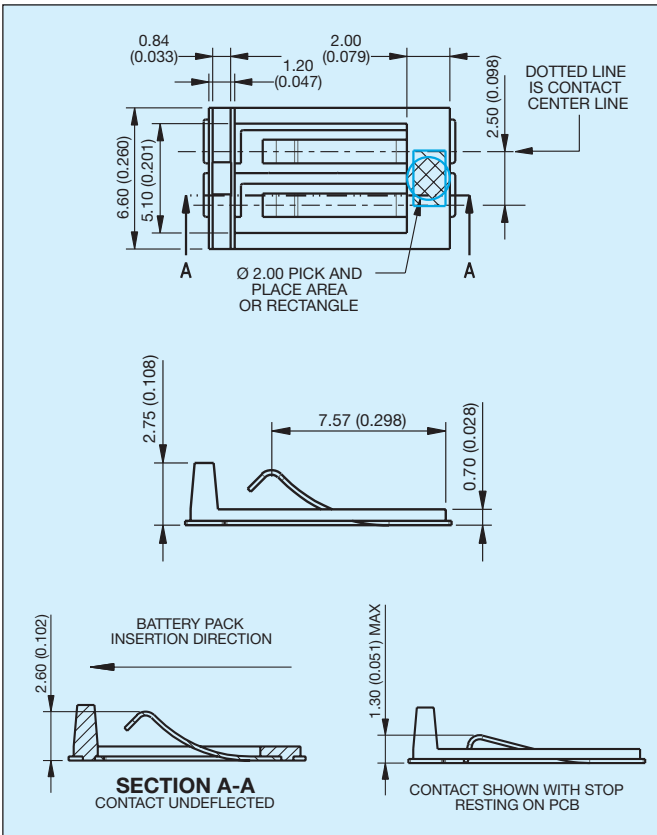
XXX



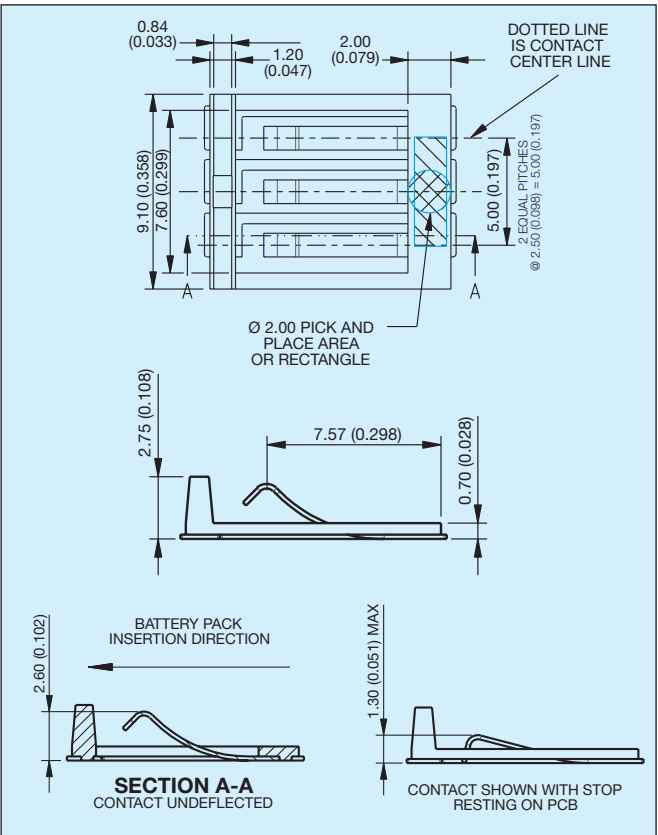
Plating Option

| Code | Description |
|------|-------------------------------------|
| 006 | 0.4µm Selective Gold, Pure Tin Tail |
| 008 | 0.8µm Selective Gold, Pure Tin Tail |

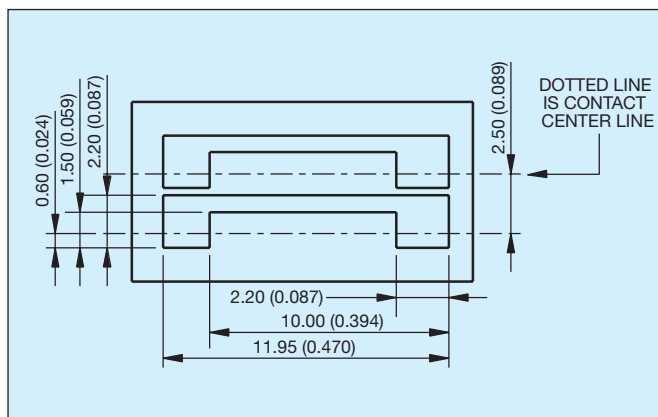
2 Way Low Profile Battery Connector



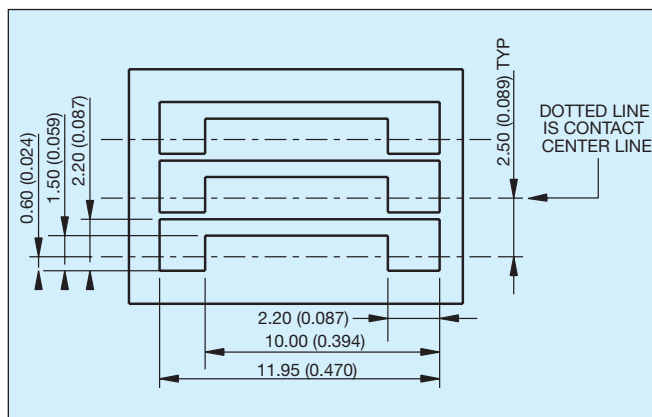
3 Way Low Profile Battery Connector



2 Way Low Profile Battery Connector PCB Layout



3 Way Low Profile Battery Connector PCB Layout



9155 MOBO™ Solderless Battery Connectors



GENERAL DESCRIPTION

As an addition to our range of Battery connectors we have added a solderless termination option. This option has the termination area gold plated and the contact form is compression to the PCB and to the Battery which is used in the end equipment.

Rated at 3 Amps and 5,000 operations (the same as the SMT version). These battery connectors compliment the existing standard range of RoHS compliant components giving the designer an added option of the solderless termination.

When these connectors are held in place by the casing of the end equipment, the connection to the PCB is achieved by compressing the connector contacts against the PCB and against the actual battery. It is the housing which maintains the connection.

AVAILABLE DEVICES:

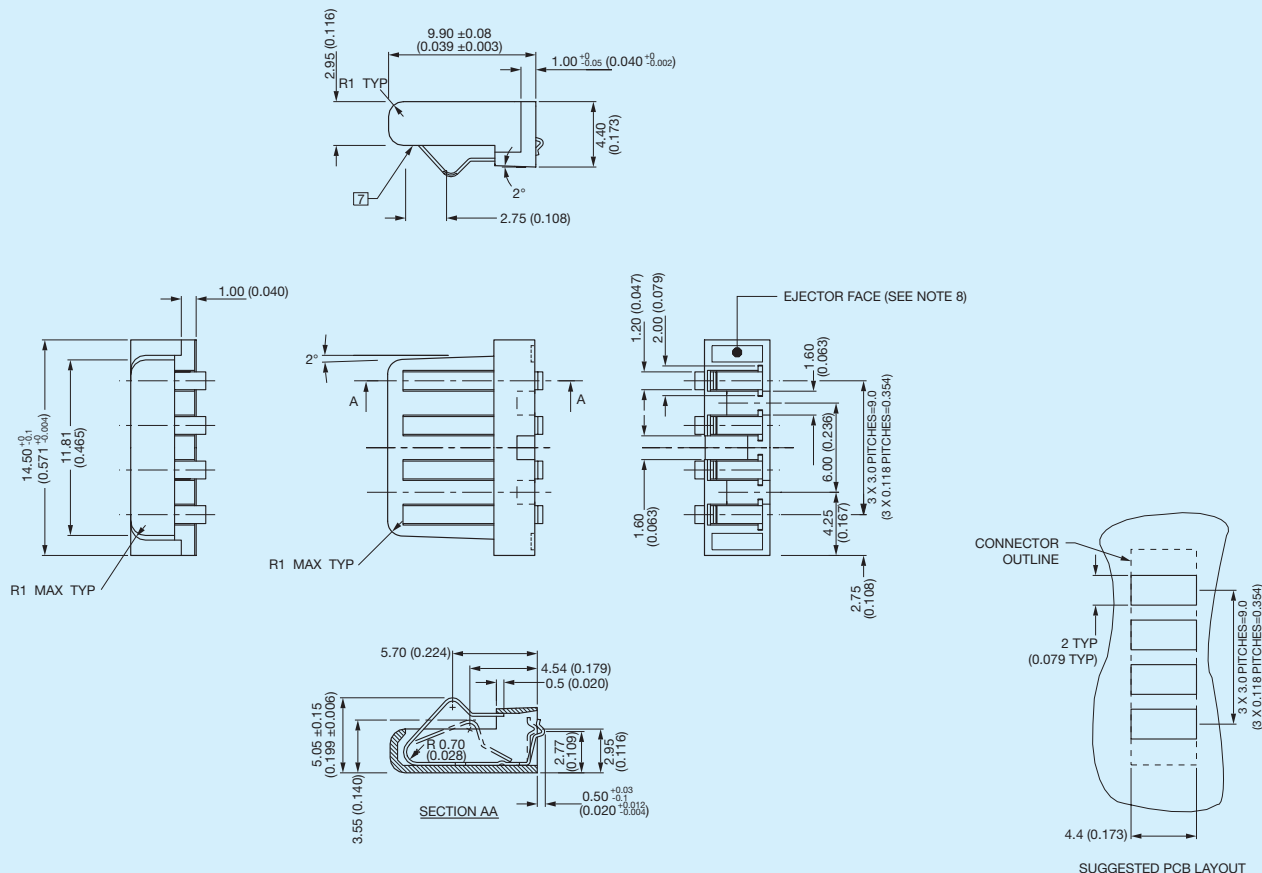
4 way: 58 9155 004 000 020

3 way: 58 9155 003 000 053

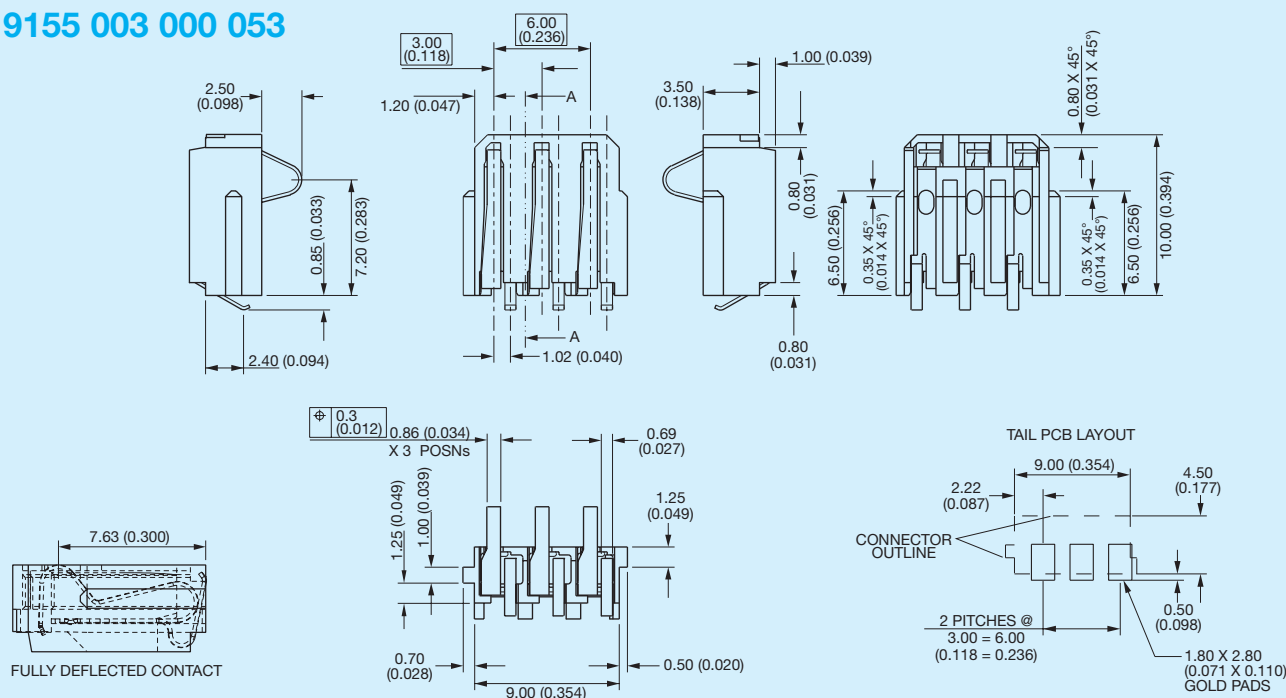
9155 MOBO™ Solderless Battery Connectors



58 9155 004 000 020



58 9155 003 000 053





GENERAL DESCRIPTION

The standard SIM connector is specifically designed for handheld devices requiring secure subscriber identification.

Following on from the introduction of our standard SIM block with an offering of 3 standard heights, 0.80mm, 1.60mm, or 2.40mm, AVX is now adding another standard to the 9162 series SIM connectors, the slide-in SIM.

Unlike SIM blocks which require SIM card guides to aid insertion, removal and retention of the SIM card, the slide-in SIM has guides as part of the connector mold design.

Contacts are stamped, gold plated, rated 0.5A, and 5000 mechanical cycles.

Our contact design is specifically rounded to avoid any possible damage during and after card insertion to the card itself, assuming normal use. The design also incorporates protection features to avoid contact damage during this operation such as contact snagging.

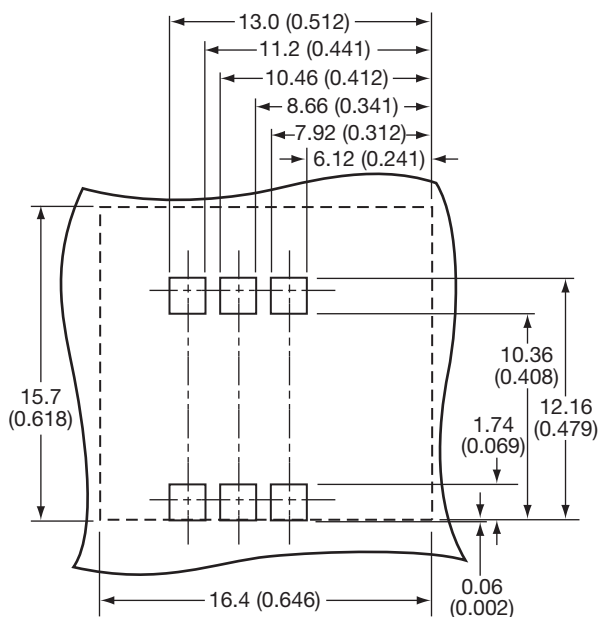
Please contact the appropriate sales office for further details of this service.

KEY FEATURES AND BENEFITS

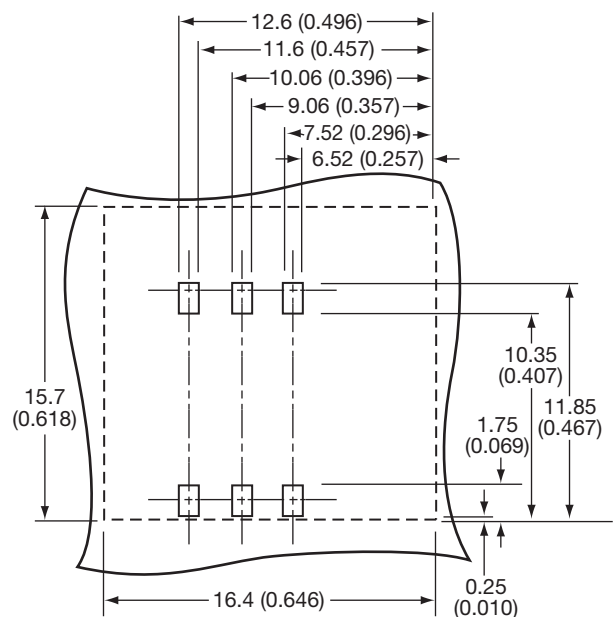
- Produced for use with micro SIM cards.
- The insulator is molded from high temperature plastic enabling the connector to be used in convection or infrared soldering processes.
- Supplied on tape and reel packaging for pick and place assembly.
- The all plastic design, assuming normal use prevents damage to the SIM card on insertion.
- Optional SMT contact size:
Standard SMT contact size – 1.60mm x 1.60mm
Narrow SMT contact size – 1.05mm x 0.60mm
- RoHS Compliant available.



Standard SMT Contact Layout



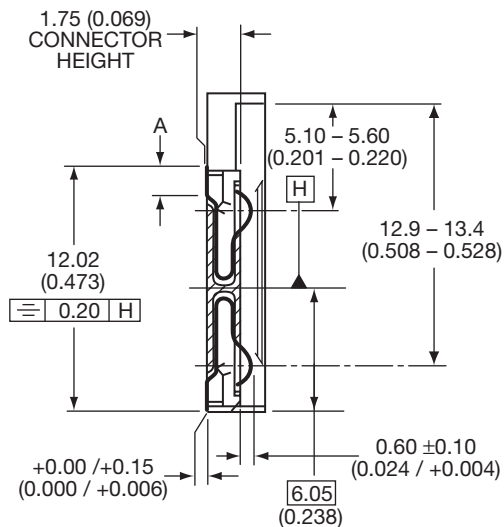
Narrow SMT Contact Layout



9162 Slide-In SIM Card Connector

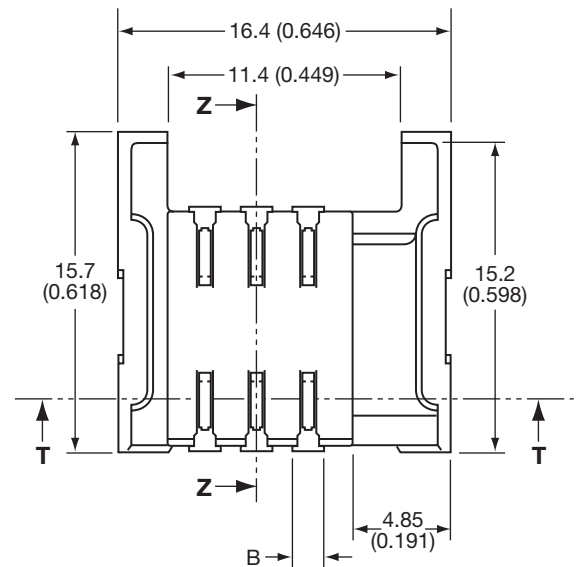


Connector Height 1.75mm

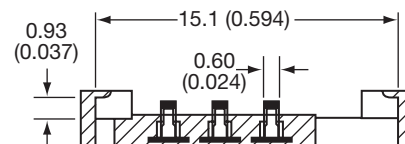


SECTION Z-Z

| | Standard | Narrow |
|----------|--------------|--------------|
| A | 1.46 (0.057) | 1.05 (0.041) |
| B | 1.60 (0.063) | 0.60 (0.024) |



SECTION T-T



HOW TO ORDER

00

Prefix
00 = Standard
58 = Special

9162

Series

006

No. of Contacts
006 = 6

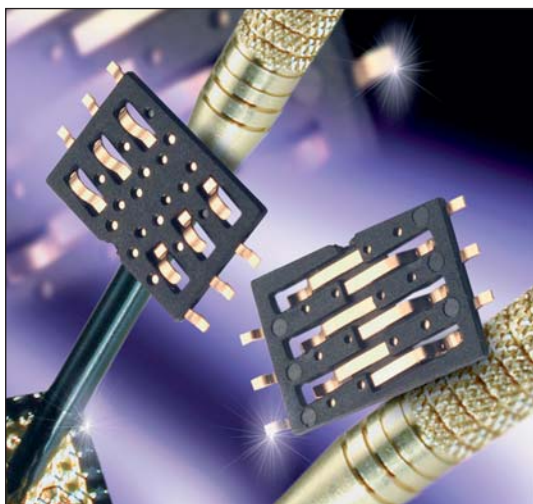
2X 6

SIM Type
20 = Standard SMT
Footprint
21 = Narrow SMT
Footprint

Plating Options
Selective Gold,
Pure Tin Tail

XXX

Connector Height
XXX refers to
Connector Height
175 = 1.75mm stack height



GENERAL DESCRIPTION

The standard SIM connector is specifically designed for handheld devices requiring secure subscriber identification.

The connectors are available in a standard 6 pin configuration on a 2.54mm pitch and at optional heights of 0.8mm, 1.6mm or 2.4mm.

Contacts are stamped, gold plated, rated at 0.5A, and 5000 mechanical cycles.

Our contact design is specifically rounded to avoid any possible damage during and after card insertion to the card itself, assuming normal use. The design also incorporates protection features to avoid contact damage during this operation such as contact snagging.

In addition to our offering presented here, other operating heights are available as custom alternatives.

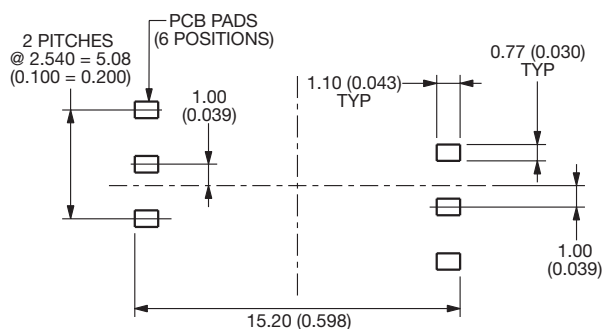
Please contact the appropriate sales office for further details of this service.

KEY FEATURES AND BENEFITS

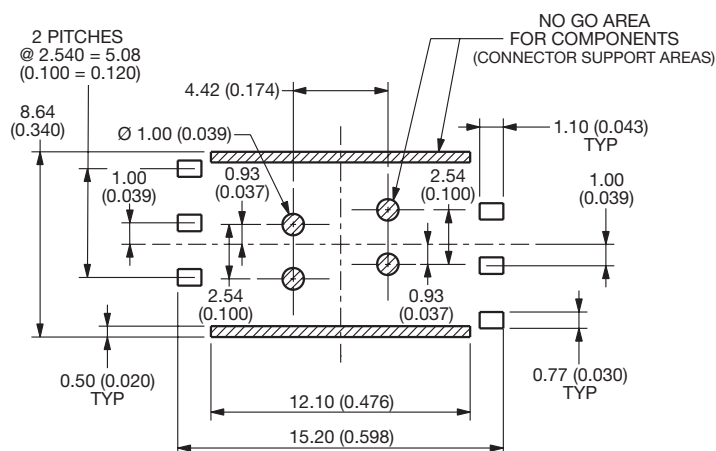
- Produced for use with both full ISO cards and micro SIM cards.
- Stand-off designs allow other components to be mounted underneath the connector offering greater effective use of PCB real estate.
- The insulator is molded from high temperature plastic enabling the connector to be used in convection or infrared soldering processes.
- Supplied on tape and reel packaging for pick and place assembly.
- RoHS Compliant.



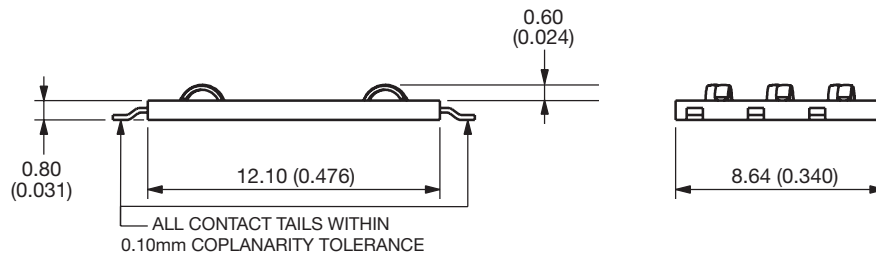
0.8mm PCB Pad Layout



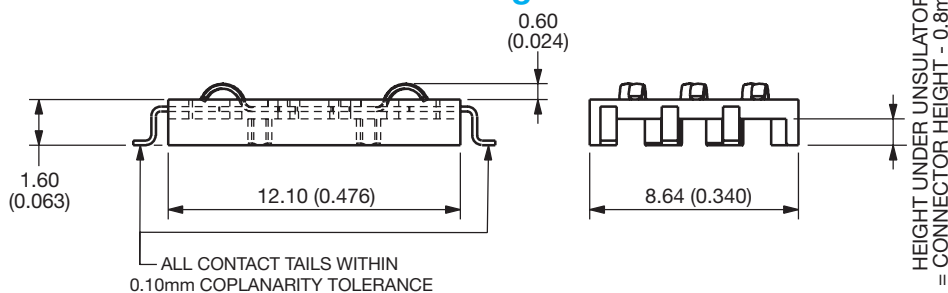
1.6mm / 2.4mm PCB Pad Layout



Connector Height 0.8mm



Connector Height 1.6mm



Connector Height 2.4mm

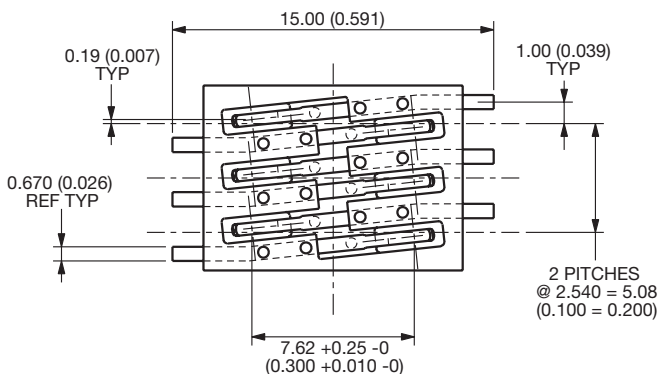
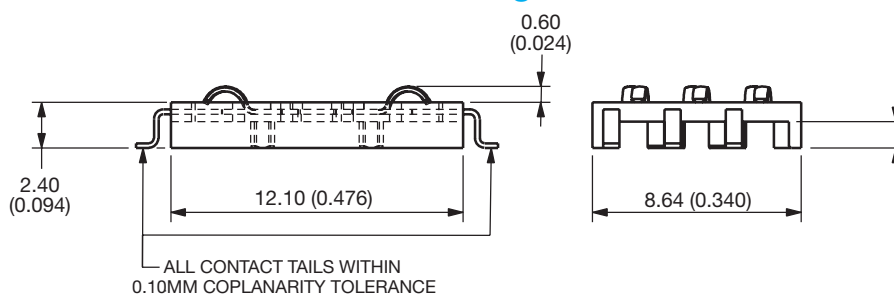
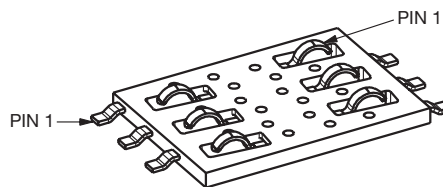


Illustration of Pin Configuration



HOW TO ORDER

00

Prefix

9162

Series

006

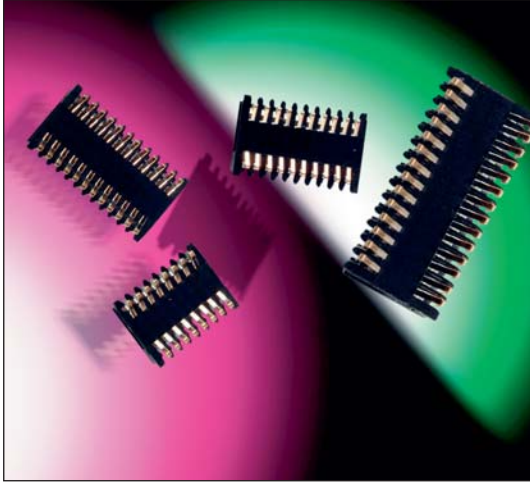
Number of Contacts

006

SIM Type
006 = Selective Gold,
Pure Tin Tail

080

Connector Height
080 = 0.8mm stack height
160 = 1.6mm stack height
240 = 2.4mm stack height



GENERAL DESCRIPTION

The MOBO™ series 9158 is a one-piece connector used to connect two PCBs within mobile phones, pagers, PDAs, security, handheld scanners, etc. in a cost-effective manner.

A standard range is available with 16, 20, 24 and 28 contacts to suit stack heights of 1.90mm to 3.30mm. Other contact variants are also available up to 5.10mm, in custom housings. The SOLO STACKER™ can allow a spacing tolerance of up to ± 0.30 mm and still provide reliable connections between the PCBs, even if they are not parallel.

SOLO STACKER™ is designed for PCB surface mounting and is supplied in tape and reel packaging. Gold plated pads on the mating PCB or suitable flex circuits provide connection between the boards.

Whatever your requirements this SOLO STACKER™ can also be customized to suit your applications.

APPLICATIONS

Suitable applications include:

- Mobile Phones
- PDA
- Medical
- PMR
- Industrial
- Security
- Handheld Scanner

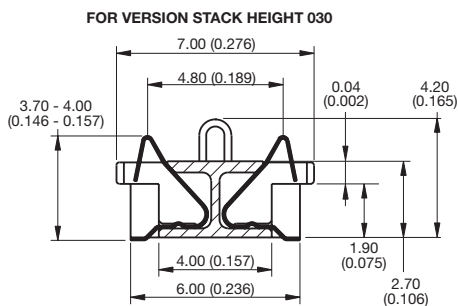
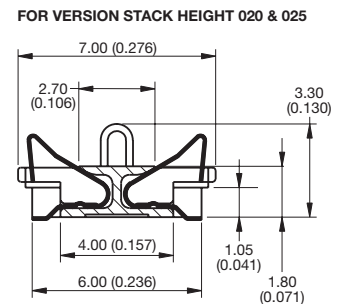
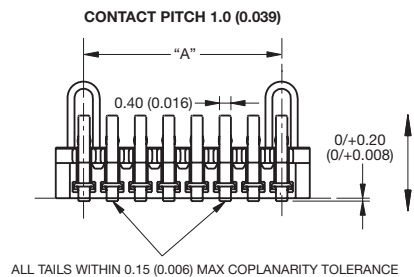
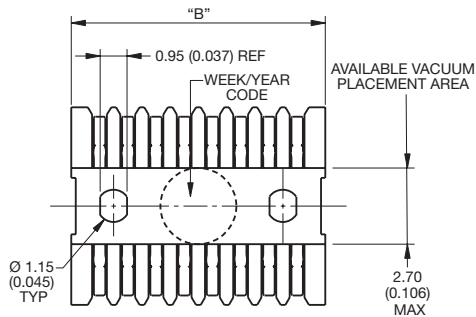
KEY FEATURES AND BENEFITS

Single piece Connector – no mating half connector required to connect two boards together which means:

- Reduced assembly time.
- Only one part to purchase and stock.
- Due to the unique contact design, the mating device does not have to be parallel.
- Extremely robust when subjected to shock and vibration.
- Cost effective.
- Helps reduce tolerance accumulation within system.



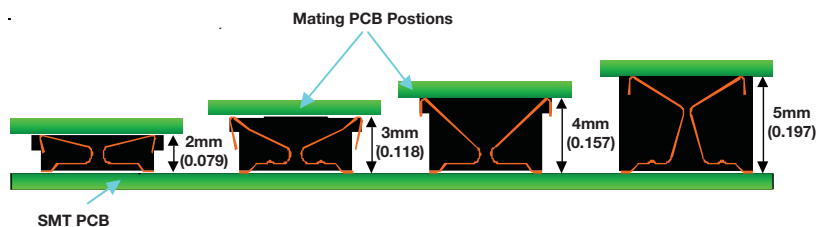
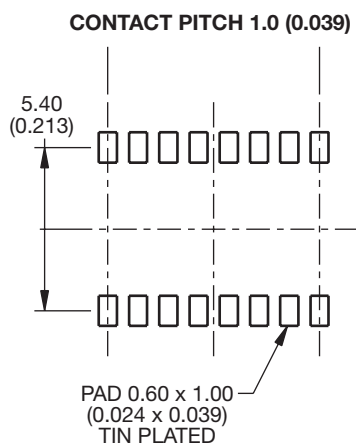
DRAWINGS AND DIMENSIONS



| Number of Positions | Part Number | A | B |
|---------------------|---------------------|----|-------|
| 16 | 00-9158-016-XXX-XXX | 7 | 9.00 |
| 20 | 00-9158-020-XXX-XXX | 9 | 11.00 |
| 24 | 00-9158-024-XXX-XXX | 11 | 13.00 |
| 28 | 00-9158-028-XXX-XXX | 13 | 15.00 |

A = Number of contact pitches at 1mm
B = Connector Length

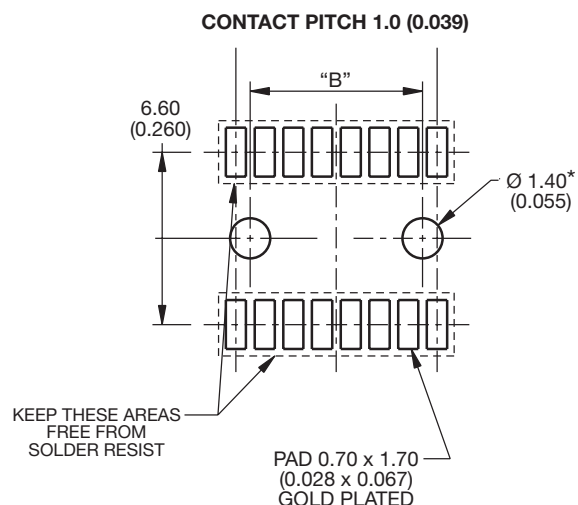
SMT PCB Footprint



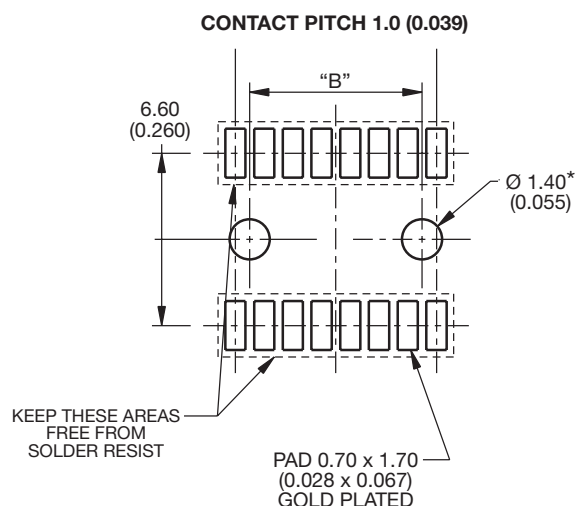
| Mating Height | Standard Positions | | | | | Special Positions | | | | | |
|---------------|--------------------|----|----|----|----|-------------------|----|----|----|----|----|
| | 16 | 20 | 24 | 28 | 32 | 4 | 18 | 28 | 30 | 34 | 40 |
| 2mm | X | X | X | X | X | | | | | X | |
| 3mm | X | X | X |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

Other sizes available on request.

Mating PCB Footprint for version stack height 020 & 030



Mating PCB Footprint for version stack height 025



* Used for Boss versions only.

| B | Dim |
|----|---------------|
| 16 | 6.00 (0.236) |
| 20 | 8.00 (0.315) |
| 24 | 10.00 (0.394) |
| 28 | 12.00 (0.472) |

HOW TO ORDER

00
Prefix
00 = Standard
58 = Special

9158
Series

XXX
No of Ways
16 = 016
20 = 020
24 = 024
28 = 028

XXX
Stack Height
020 = 1.9mm to 2.1mm
025 = 2.1mm to 2.7mm
030 = 2.8mm to 3.3mm

06
Plating Variation
06 = Selective Gold
0.25µm
Gold Plated
Contact Nose,
Pure Tin Tail

X
PCB Location Bosses
1 = With PCB Location Bosses
2 = Without PCB Location Bosses



GENERAL DESCRIPTION

The 9157 series was specifically designed for portable equipment.

AVX now offers this two-part system as a standard product. The fixed SMT socket is designed to be housed within the confined dimensional constraints of the portable device.

The plug/cover connector has sprung contacts and is designed for termination to accessory equipment. The connector is designed to house fifteen signal contacts on a 1mm pitch rated at 1.5A. There is the option to include a switching RF coax.

A cradle SMT plug connector for docking applications is also available as standard and has the option of including a SMT RF coax.

Whatever your requirements, the 9157 series can also be customized to suit your application.

APPLICATIONS

Suitable applications include:

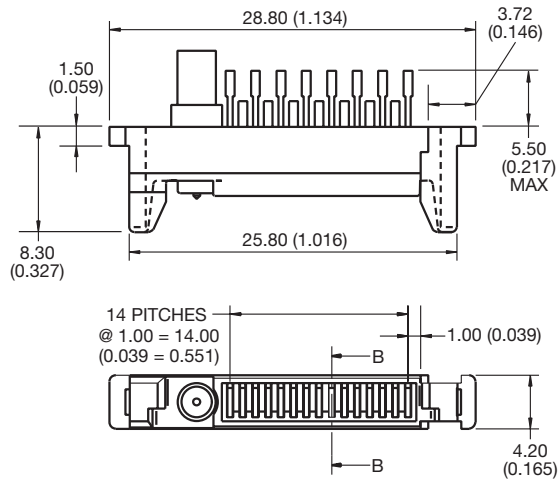
- Mobile Phones
- PDA
- Medical
- Docking/Charging for any portable device

KEY FEATURES AND BENEFITS

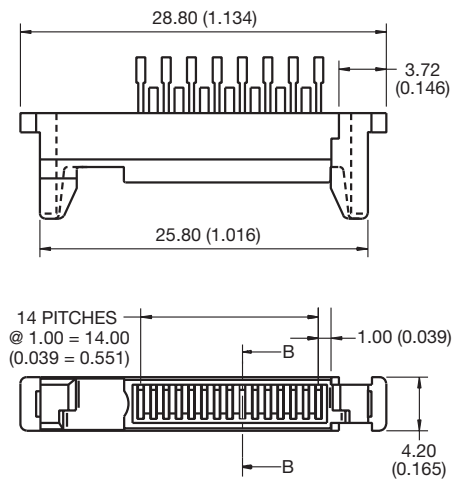
- Patented 20° angled face on the socket gives self-cleaning face when mated with plug.
- Metal Latching area integral to socket which saves PCB real estate.
- Integral to socket is a mechanical 50Ω switching coax for SMT termination.
- Single sprung plug contact design gives ten thousand mating cycles and cleaning/wiping action.
- Customer has option to terminate own RF coax using AVX custom tooling: 06-9157-7116-01-000.
- SMT plug has unique location pyramids that give positive alignment to portable device, and assist blind mating.
- RoHS Compliant available.



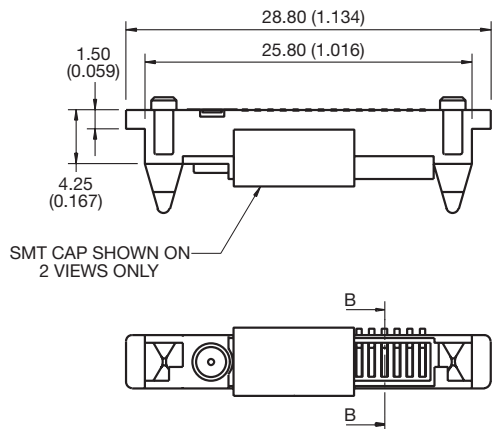
Plug Wire with Coax



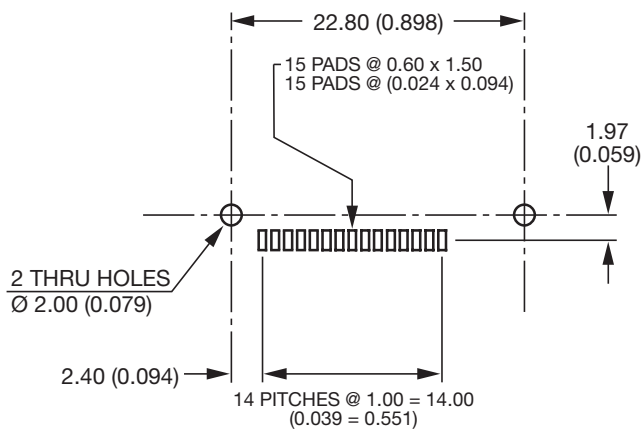
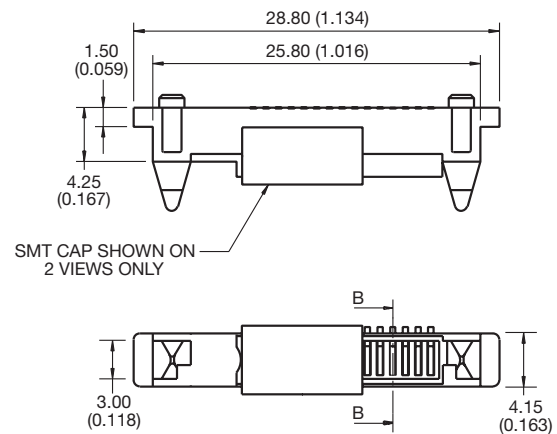
Plug Wire without Coax



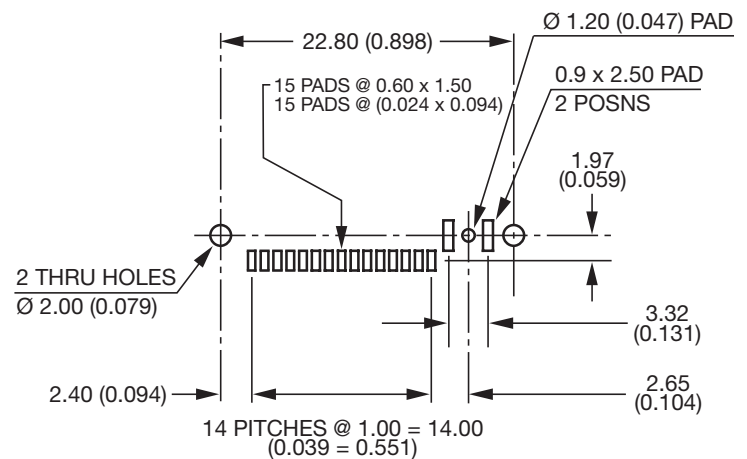
SMT Plug with Coax



SMT Plug without Coax

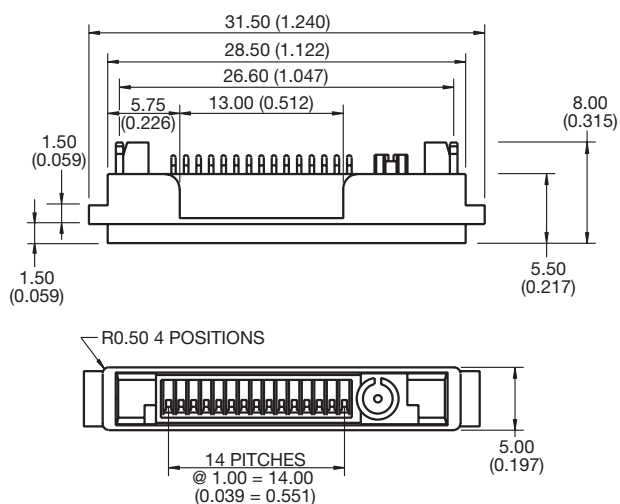


SUGGESTED PCB LAYOUT

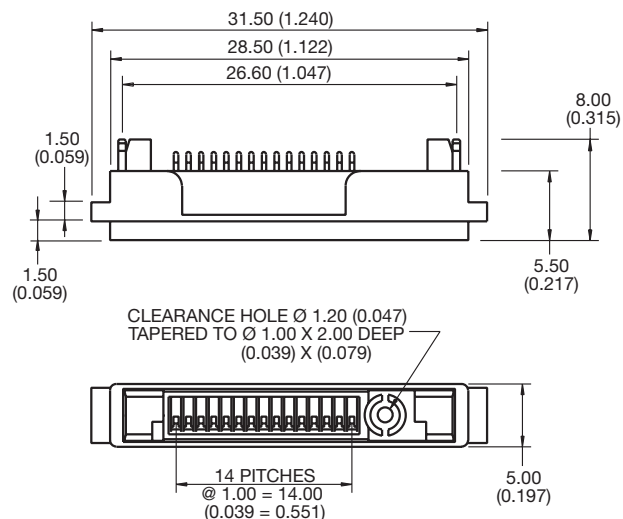


SUGGESTED PCB LAYOUT

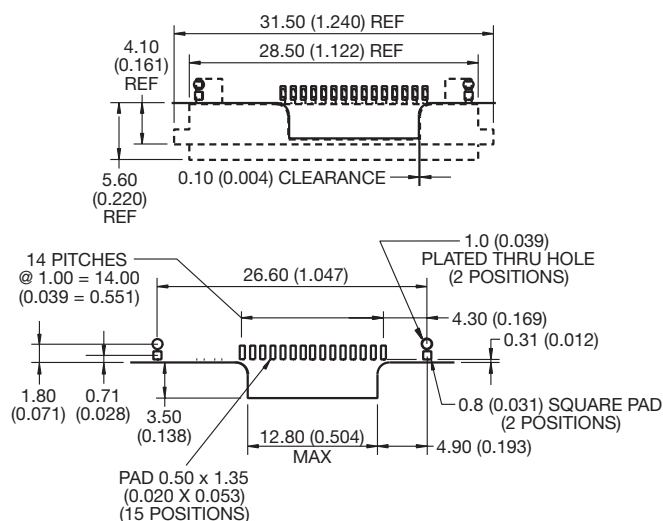
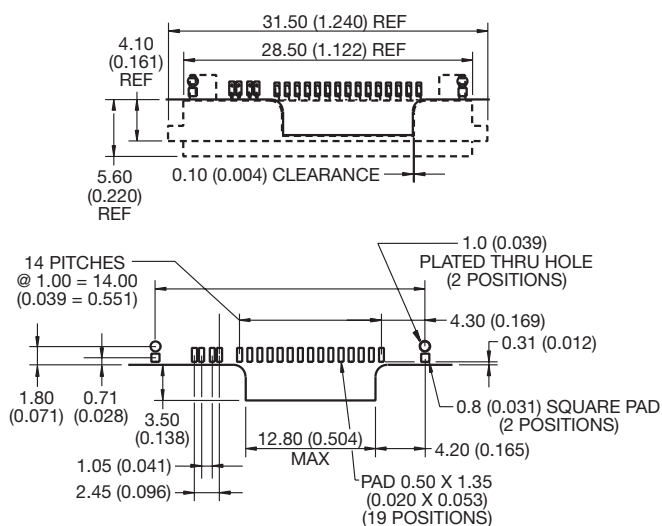
SMT Socket with Coax



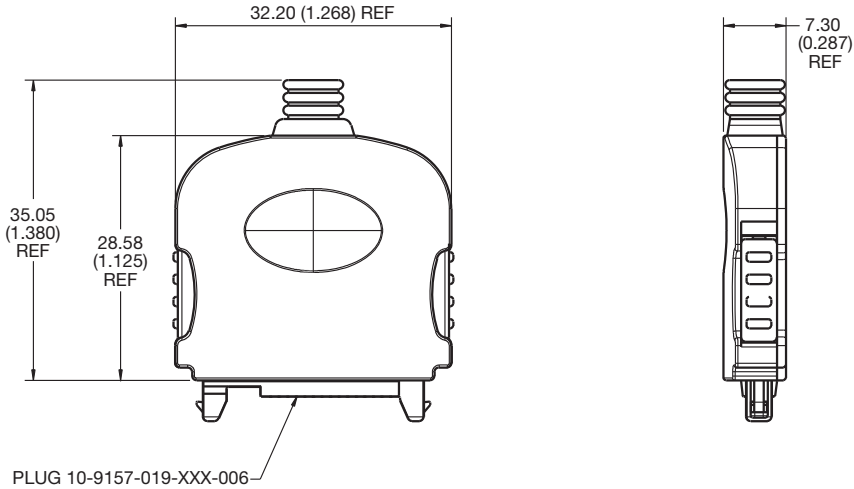
SMT Socket without Coax



SMT PAD LAYOUT



Cover Kit



HOW TO ORDER

Plug Options – Example

| | | | | |
|--|---------------|-------------------------------|---|---|
| 10 | 9157 | 015 | 000 | 006 |
| Prefix 10 = Plug 58 = Special | Series | No of Ways 15 = 015 | RF Coax Option 000 = No RF Coax 001 = With RF Coax | Contact Type 006 = Solder Wire 007 = SMT |

Socket Options – Example

| | | | | |
|--|---------------|-------------------------------|---|----------------------------------|
| 20 | 9157 | 015 | 000 | 006 |
| Prefix 20 = Socket 58 = Special | Series | No of Ways 15 = 015 | RF Coax Option 000 = No RF Coax 001 = With RF Coax | Contact Type 006 = SMT |

Cover Options – Example * Parts supplied in kit form

| | | | | |
|--|---------------|--|-----------------|--|
| 30 | 9157 | 9700 | 00 | 000 |
| Prefix 30 = Sub Assembly 58 = Special | Series | Cover Version 9700 = Screw/Press-fit Version 9701 = Ultrasonically Welded Version | Standard | Grommet Variation 000 = No Grommet 035 = to suit ϕ 3.50 cable 050 = to suit ϕ 5.00 cable |

Patent: 2276285
5540599

Note: Application tooling to terminate coax cable 06-9157-7116-01-000.

9157 MOBO™ 19 Way I/O Connector



GENERAL DESCRIPTION

Based on our standard 15 way 9157 I/O family, AVX has now released a family 19 way devices. This range includes a SMT 90 degree plug, a wire socket version that is used with the standard 9157 cover and a SMT socket for charging applications.

Options with the 90 degree SMT socket include the sealing of the connector contacts and the connector to the housing up to IP67. There is also an option to have an EMLB (early mate, late break) on pins 1 and 19.

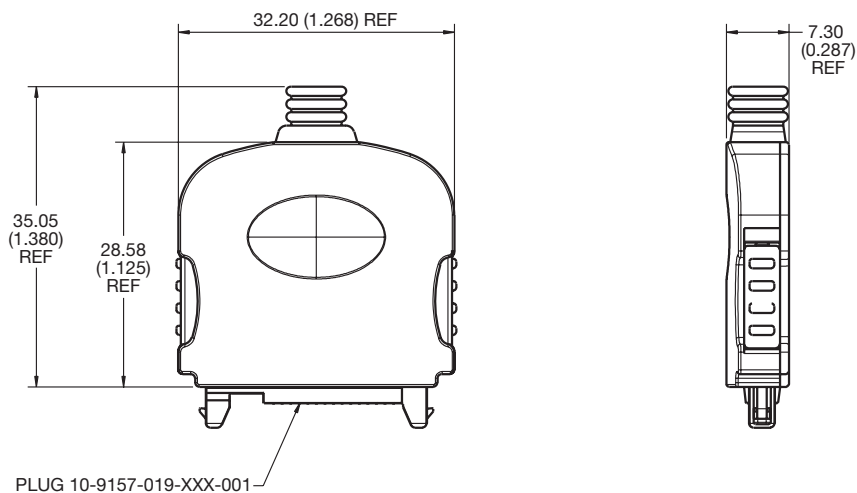
To achieve the seal to the device housing, it may be necessary to customize the device housing design.

On the SMT 90 degree version, we also have the capability of an integrated DC jack, enabling both the DC jack and the 19 way cover to be plugged in at the same time.

AVAILABLE DEVICES:

| | |
|----------------------|---------------------------|
| 10 9157 019 000 006 | Plug wire version |
| 10 9157 019 000 007 | SMT charging version |
| 20 9157 019 000 006 | 90 degree SMT socket |
| 30 9157 97 XX 00 000 | Cover options see page 19 |

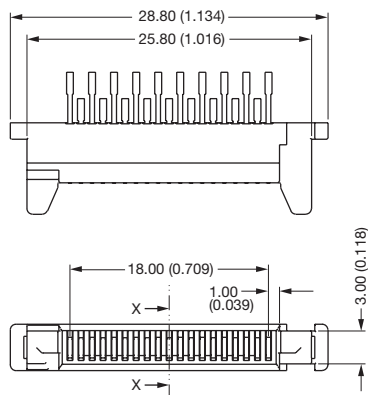
Cover Kit



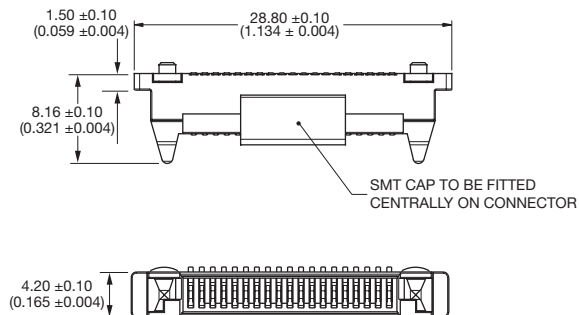
9157 MOBO™ 19 Way I/O Connector



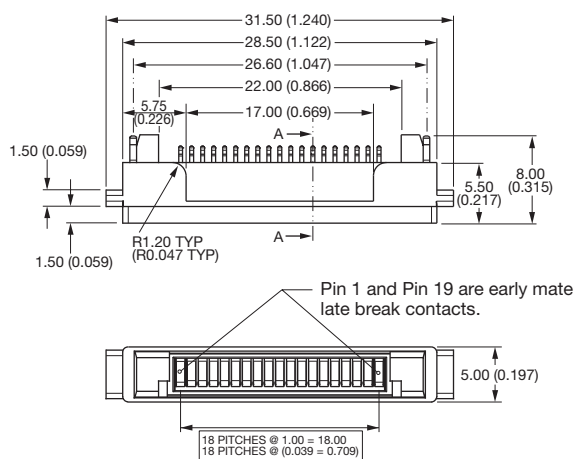
Plug Wire



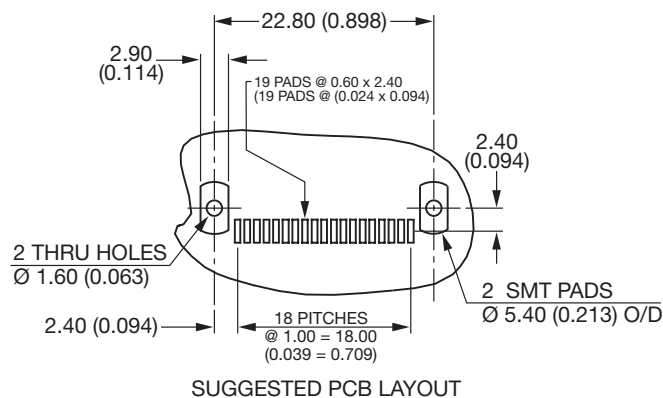
SMT Plug



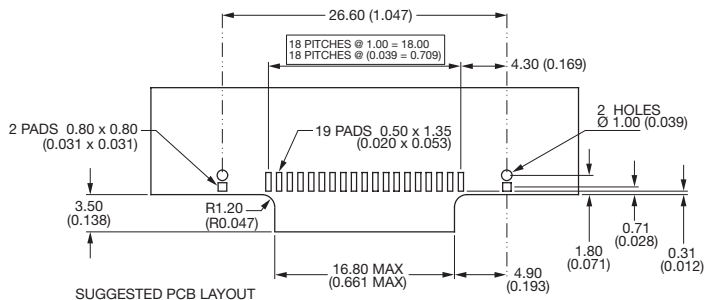
SMT Socket



SMT Plug (Suggested PCB Layout)



SMT Socket (Suggested PCB Layout)



9151/9152/9153 MOBO™ High Reliability Spring Pin Connectors



GENERAL DESCRIPTION

To compliment the stamped and formed spring technology, we have available a range of spring pin devices used in high reliability battery and I/O applications. These applications range from secure radio I/O, micro-phone cable connections, battery backed medical equipment, logistics terminals and military equipment.

This flexible capability combines standard contacts with custom molded housings. These can vary in size, shape and termination style, for example flex, PCB and cable. The available contact options enables us to offer a wide range of variations.

Within the range we can offer options of turned pins for both plug and socket (9151), or turned pin socket (9152) and stamped plug (9153).

Custom designs from the product ranges include:

- Integrated coax connections
- Sealing up to IP68
- Variations for contact layout, (eg single row, dual row, circular and grid)
- Screw fixing of the plug to the socket from the cover
- Latch fixing of the plug to the socket from the cover
- Die cast covers for military applications
- Polarization of covers on a multi-connector device
- 90 degree and in-line covers
- Variation of the contact pitch



GENERAL DESCRIPTION

An I/O interconnect system designed for portable equipment.

AVX offers this plug and socket reduced size system as a standard product. The fixed SMT socket is designed to be mounted on a PCB and housed within a portable device. The plug is designed for cable termination with options of single and double sided contacts and customizing the overmold cover or parts can be supplied as connector only for sub contract termination. The socket connector houses 16 contacts in two rows on 1.25mm pitch with a rating of 1 amp per contact. Both connectors are RoHS compliant.

APPLICATIONS

Suitable applications include:

- Cellular Phones
- Handheld Devices
- Industrial Modules
- Medical Electronics

KEY FEATURES AND BENEFITS

- No latching is required due to the click design of the contacts.
- Optional customization of the overmold cover.
- Options of single row (8 way) or dual row (16 way) plug connector.
- Compact size to optimize PCB real estate.
- Metal outer cover provides integrated PCB location and solder tab.
- Positive alignment and orientation of the plug and socket.
- 5K mating cycles and 1 amp rated.

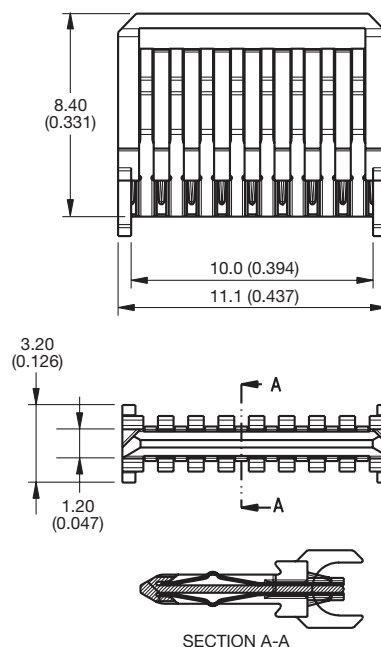
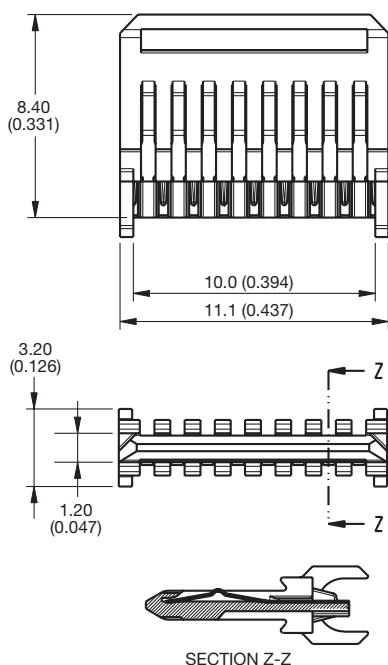


9257 Reduced Size I/O Connector

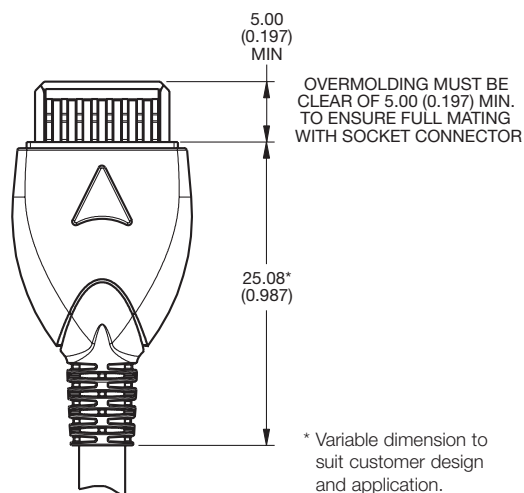


Single Sided 8 Way I/O Plug Connector

Dual Sided 16 Way I/O Plug Connector



Suggested Overmolding for Plug Connector



HOW TO ORDER

10
Prefix
10 = Plug Connector

9257
Series

016
No of Ways
016 = 16 way dual sided
008 = 8 way single sided

001
Contact
001 = Solder Bucket

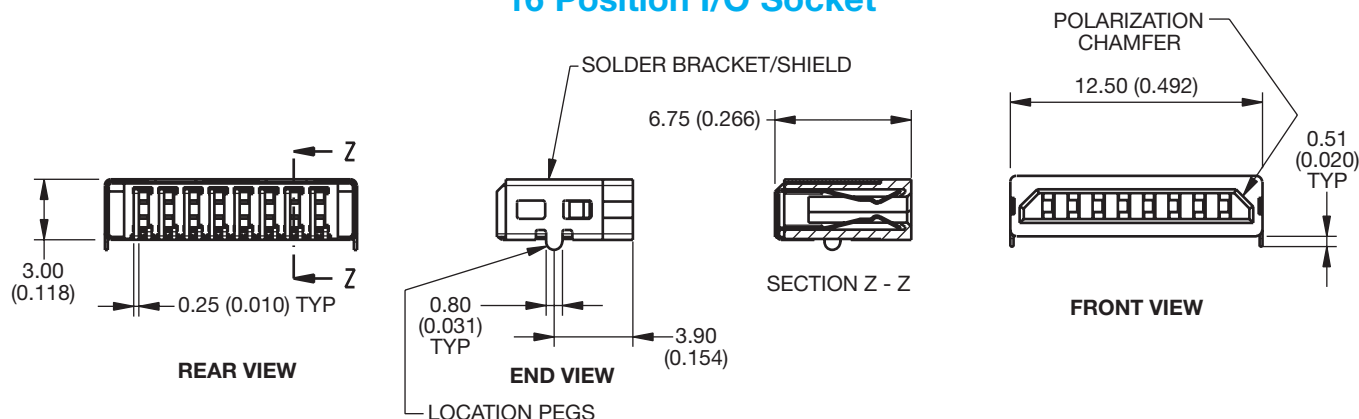
003
Plating Option
003 = 0.8µm Selective Gold,
Tin Tail

- Notes:
1. All dimensions are for reference only unless toleranced.
 2. For full product specification refer to AVX spec 201-01-089.
 3. Parts packed in tube with 50 parts per tube.

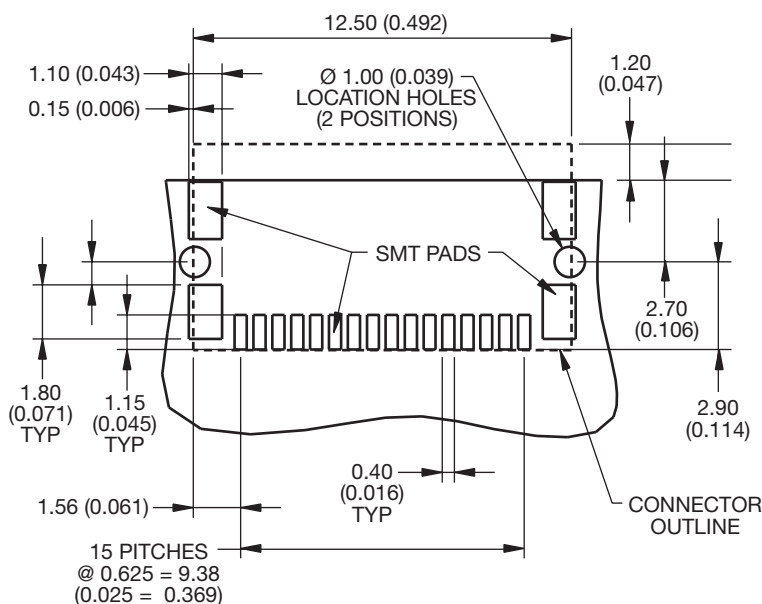
9257 Reduced Size I/O Connector



16 Position I/O Socket



PCB Layout



HOW TO ORDER

| | | | | | |
|-----------------------|---------------|-------------------|-----------------------|--|------------------------------------|
| 20 | 9257 | 016 | 001 | 01 | 3 |
| Prefix | Series | No of Ways | Contacts | Solder Bracket | Plating Option |
| 20 = Socket Connector | | 16 = 016 | 001 = SMT Termination | 01 = Solder Bracket with location pegs | 3 = 0.8µm Selective Gold, Tin Tail |

| Packing Details | |
|-----------------|------|
| Reel Qty. | 1100 |
| Pack Qty. | 5500 |

- Notes:
1. 16 Way I/O Socket.
 2. For full product specification refer to AVX spec 201-01-089.
 3. General tolerance ± 0.20 (0.008) unless otherwise stated.
 4. SMT feet within 0.13 (0.005) coplanarity.



9175 Series



Wire to Board IDC Connector



The 9175 series from AVX offers customers the ability of connecting individual wires to a single row of contacts using IDC technology.

Available as a 2 or 3 pin connector it is both low profile and has a small PCB footprint. The connector is SMT assembled to the PCB prior to assembly of the wire.

Using a small application tool, the wires are then inserted into the contact slot. This process cuts the insulation and enables the individual conductors of the wire to form a homogeneous joint. The shape of the molding also forms a restraint to the wire when fully inserted in the contact. These connectors are supplied in tape and reel for easy pick and place. The wire options are 28 or 26 AWG solid or stranded wire.

APPLICATIONS

- PCB to PCB individual wire interconnect
- High volume and high speed assembly
- Device to PCB interconnect (coils, sensors, etc.)

FEATURES AND BENEFITS

- Small single row IDC
- Rated at 1 amp
- Uses both stranded and solid wire (26 or 28 AWG)
- Insulators are end to end stackable for higher pin counts
- Uses simple hand tool for higher volume applications

HOW TO ORDER

00

Prefix

9175

Series

002

Number of Ways

002 = 2
003 = 3

001

Wire Gauge Size

| Code | Accepted Wire Gauge | Wire Insulation |
|------|--|--------------------------|
| 001 | 28 Gauge Solid or Stranded 26 Gauge Solid or Stranded | Min Ø 0.70 Max Ø 1.00 |

006

Plating Option

006 = Pure Tin All Over

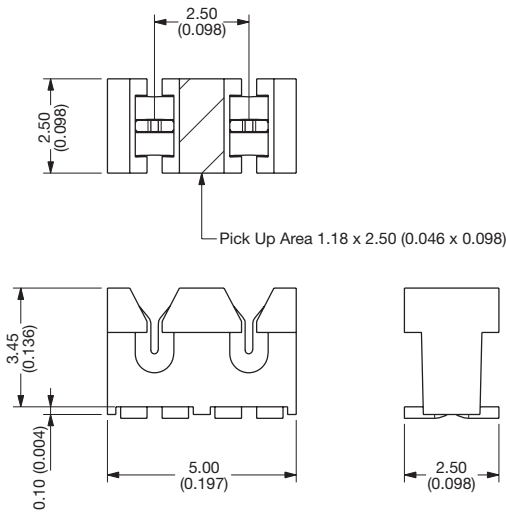


9175 Series

Wire to Board IDC Connector



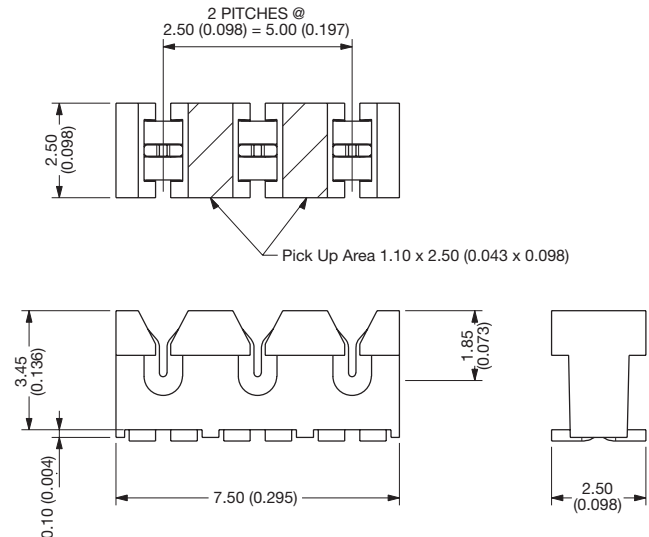
2 WAY IDC CONNECTOR



SMT PCB LAYOUT

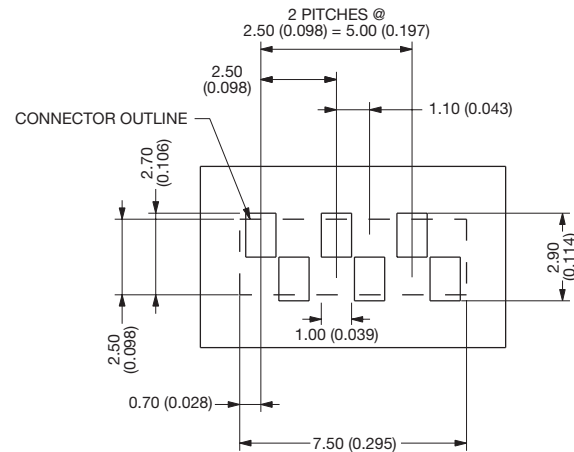
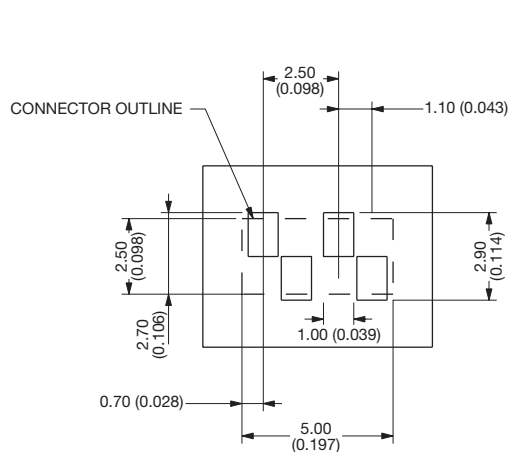
PURE TIN PADS

3 WAY IDC CONNECTOR

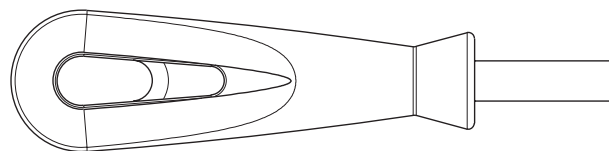


SMT PCB LAYOUT

PURE TIN PADS

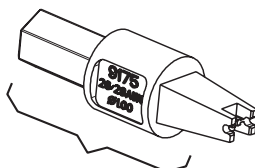


HAND INSERTION TOOLING



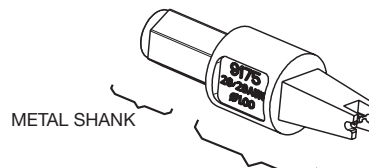
UNIVERSAL HANDLE

| Details | Tool Part Number |
|-------------------------|---------------------|
| 6.35 A/F HEX BIT HOLDER | 06 7000 7730 01 000 |



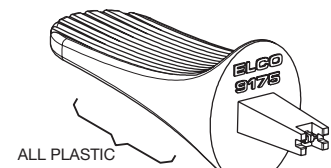
ALL METAL HIGH PRODUCTION Metal

| Max Insulation Dia | Tool Part Number |
|--------------------|---------------------|
| Ø 1.00 | 06 9175 7017 01 000 |



MED PRODUCTION Metal/Plastic

| Max Insulation Dia | Tool Part Number |
|--------------------|---------------------|
| Ø 1.00 | 06 9175 7016 01 000 |



LOW PRODUCTION Plastic

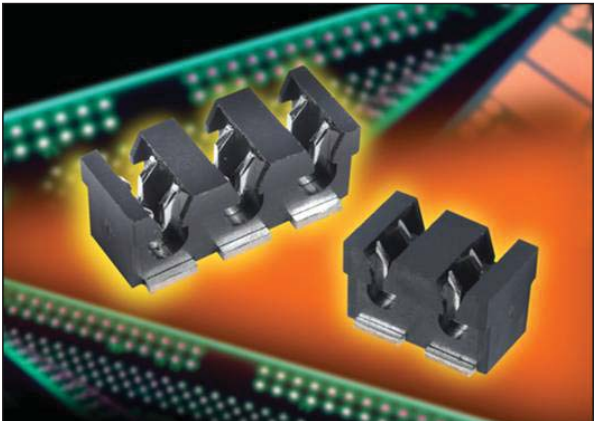
| Max Insulation Dia | Tool Part Number |
|--------------------|---------------------|
| Ø 1.00 | 06 9175 7004 01 000 |



9176 Series



Wire to Board Strip IDC Connector



The 9176 series from AVX offers customers the ability of connecting individual wires to a single row of contacts using IDC technology.

Available as a 2 or 3 pin connector it is both low profile and has a small PCB footprint. The connector is SMT assembled to the PCB prior to assembly of the wire.

Using a small application tool, the wires are then inserted into the contact slot. This process cuts the insulation and enables the individual conductors of the wire to form a homogeneous joint. The shape of the molding also forms a restraint to the wire when fully inserted in the contact. These connectors are supplied in tape and reel for easy pick and place. The wire options are 18 to 24 AWG stranded wire.

APPLICATIONS

- PCB to PCB individual wire interconnect
- Device to PCB interconnect (LED Modules and LED Strips)

FEATURES AND BENEFITS

- Small single row IDC
- Rated at 10 amps
- Uses both stranded wire (18 to 24 gauge)
- Insulators are end to end stackable for higher pin counts
- Uses simple hand tool for higher volume applications

HOW TO ORDER

00

Prefix

9176

Series

002

Number of Ways

002 = 2
003 = 3

001

Wire Gauge Size

| Code | Accepted Wire Gauge | Wire Insulation |
|------|---------------------|-----------------|
| 001 | 18 Gauge Stranded | Ø 1.6 - 2.1 |
| 011 | 20 Gauge Stranded | Ø 1.6 - 2.1 |
| 022 | 22 Gauge Stranded | Ø 1.1 - 1.6 |
| 032 | 24 Gauge Stranded | Ø 1.1 - 1.6 |

006

Plating Option

006 = Pure Tin All Over

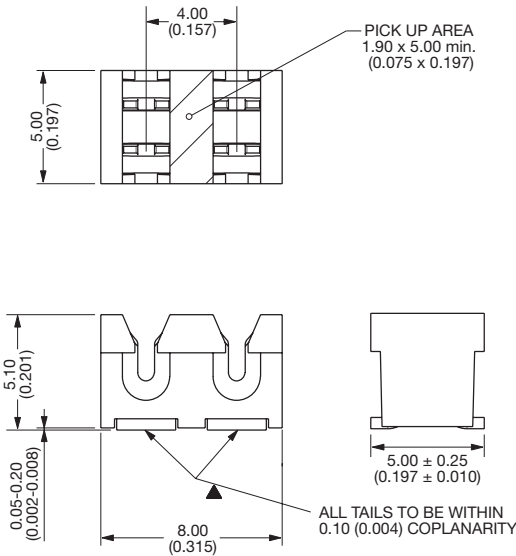


9176 Series

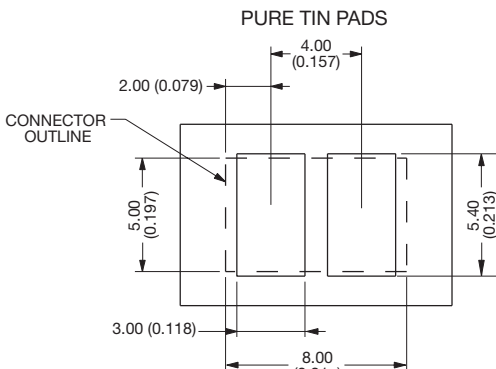


Wire to Board Strip IDC Connector

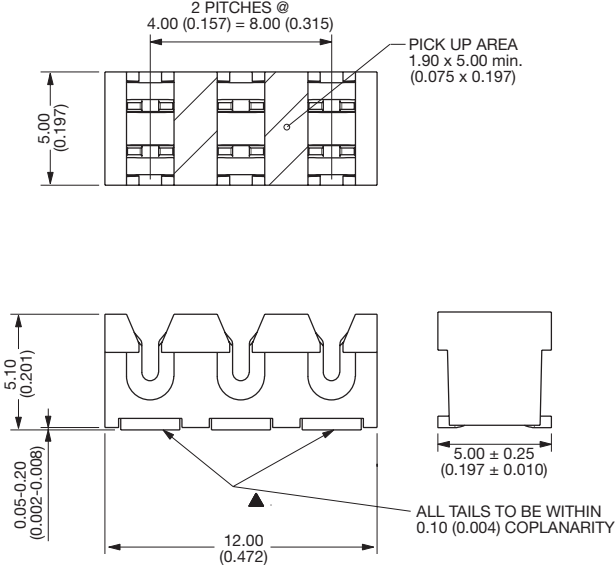
2 WAY IDC CONNECTOR



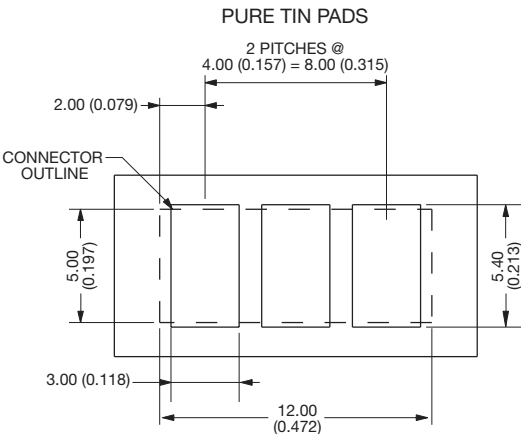
SMT PCB LAYOUT



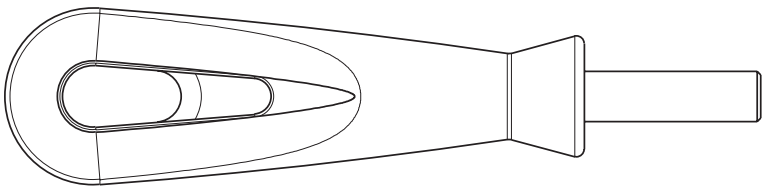
3 WAY IDC CONNECTOR



SMT PCB LAYOUT

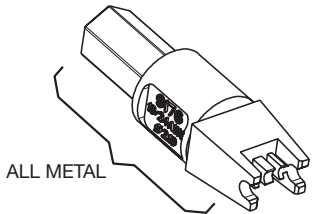


HAND INSERTION TOOLING



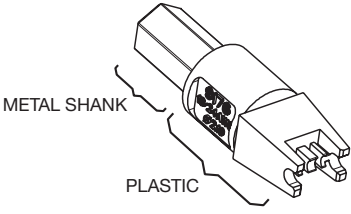
UNIVERSAL HANDLE

| Details | Tool Part Number |
|-------------------------|---------------------|
| 6.35 A/F HEX BIT HOLDER | 06 7000 7730 01 000 |



HIGH PRODUCTION Metal

| Max Insulation Dia | Tool Part Number |
|--------------------|---------------------|
| Ø 2.10 | 06 9176 7017 01 000 |
| Ø 1.60 | 06 9176 7017 02 000 |



MED PRODUCTION Metal/Plastic

| Max Insulation Dia | Tool Part Number |
|--------------------|---------------------|
| Ø 2.10 | 06 9176 7016 01 000 |
| Ø 1.60 | 06 9176 7016 02 000 |



AMERICAS

**AVX Myrtle Beach, SC
Corporate Offices**
Tel: 843-448-9411
FAX: 843-448-1943

AVX Northwest, WA
Tel: 360-699-8746
FAX: 360-699-8751

AVX North Central, IN
Tel: 317-848-7153
FAX: 317-844-9314

AVX Midwest, MN
Tel: 952-974-9155
FAX: 952-974-9179

AVX Mid/Pacific, CA
Tel: 510-661-4100
FAX: 510-661-4101

AVX Northeast, MA
Tel: 617-479-0345
FAX: 843-916-7614

AVX Southwest, AZ
Tel: 602-678-0384
FAX: 602-678-0385

AVX South Central, TX
Tel: 214-566-2859
FAX: 972-461-0575

AVX Southeast, GA
Tel: 404-608-8151
FAX: 770-972-0766

AVX Canada
Tel: 905-238-3151
FAX: 905-238-0319

AVX South America
Tel: ++55-11-2193-7200
FAX: ++55-11-2193-7210

EUROPE

**AVX Limited, England
European Headquarters**
Tel: ++44 (0) 1252-770000
FAX: ++44 (0) 1252-770001

AVX/ELCO, England
Tel: ++44 (0) 1638-675000
FAX: ++44 (0) 1638-675002

AVX S.A.S., France
Tel: ++33 (0) 1-69-18-46-00
FAX: ++33 (0) 1-69-28-73-87

AVX GmbH, Germany
Tel: ++49 (0) 8131-9004-0
FAX: ++49 (0) 8131-9004-44

AVX srl, Italy
Tel: ++390 (0)2 614-571
FAX: ++390 (0)2 614-2576

AVX Czech Republic
Tel: ++420 57 57 57 521
FAX: ++420 57 57 57 109

ASIA-PACIFIC

**AVX/Kyocera, Singapore
Asia-Pacific Headquarters**
Tel: (65) 6286-7555
FAX: (65) 6488-9880

AVX/Kyocera, Hong Kong
Tel: (852) 2-363-3303
FAX: (852) 2-765-8185

AVX/Kyocera, Korea
Tel: (82) 2-785-6504
FAX: (82) 2-784-5411

AVX/Kyocera, Taiwan
Tel: (886) 2-2698-8778
FAX: (886) 2-2698-8777

AVX/Kyocera, Malaysia
Tel: (60) 4-228-1190
FAX: (60) 4-228-1196

Elco, Japan
Tel: 045-943-2906/7
FAX: 045-943-2910

Kyocera, Japan - AVX
Tel: (81) 75-604-3426
FAX: (81) 75-604-3425

Kyocera, Japan - KDP
Tel: (81) 75-604-3424
FAX: (81) 75-604-3425

**AVX/Kyocera, Shanghai,
China**
Tel: 86-21 6215 5588
FAX: 86-21 6215 5580

AVX/Kyocera, Beijing, China
Tel: 86-10 6588 3528
Fax: 86-10 6588 3529

AVX/Kyocera, Tianjin, China
Tel: 86-22 8558 9052
Fax: 86-22 5885 9061

ASIA-KED

KED, Hong Kong
Tel: (852) 2305 1080
FAX: (852) 2305 1405

KED, Shanghai
Tel: (86) 21 6859 9898
FAX: (86) 21 5887 2542

KED, Beijing
Tel: (86) 10 5869 4655
FAX: (86) 10 5869 4677

KED, South Korea
Tel: (82) 2 783 3288
FAX: (82) 2 783 3207

KED, Taiwan
Tel: (886) 2 2950 0268
FAX: (886) 2 2950 0520

KED, Singapore
Tel: (65) 6255 3122
FAX: (65) 6255 5092

Contact:

