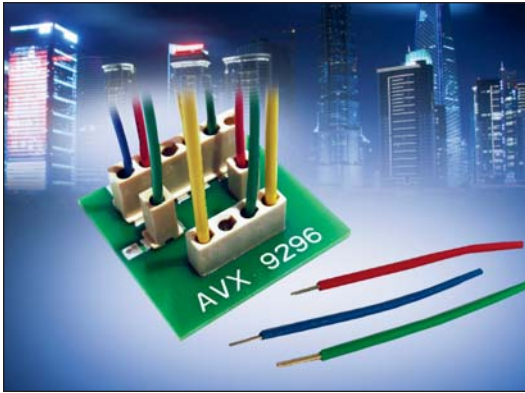


Poke Home: Vertical Through Board WTB

Series 9296



AVX continues to develop innovative connectors for the industrial electronics market that provide significant benefits over existing, outdated connector solutions. Listening to the design engineering community, there are ongoing applications where they cannot find an off-the-shelf solution that will satisfy a high percentage of the projects configuration, performance and cost goals.

The newest addition to AVX's broadening line of Wire-to-Board (WTB) connectors offers a cost effective, single Poke-Home connector solution that will meet the cost and performance targets in demanding, yet user friendly applications. At the heart of the connector is the industry proven dual line, 3mm high spring force box contact that has been on the market as a stand-alone horizontal contact only solution.

The new SMT vertical through board connector allows for 18AWG to 26AWG wires to be simply stripped and inserted into the connector body at 180 degree orientation to the bottom side of the PCB with an above board height of 0.80mm. This single connector will replace existing 2-Piece WTB solutions where a header is soldered onto the PCB and a secondary crimp-to-wire receptacle assembly is plugged in. Available in 1-6 positions, each connector will accept the entire wire gauge range for either solid or stranded wires at varying current ratings supported by each wire size. Once inserted, wires can easily be removed or replaced by twisting/unscrewing or by using a small blade extraction tool.

APPLICATIONS

- Industrial/Ruggedized Wire-to-Board applications
- Replace hard soldering of wire to a PCB
- Replace costly 2-Piece header and receptacle products
- Reference Product Specification 201-01-151
- Reference Application Notes 201-01-152

FEATURES AND BENEFITS

- Dual Beam box contact provides maximum mechanical stability and wire retention
- Tape and reel packaged for automated SMT placement
- Will accept either solid or stranded wire, 18-26AWG, plated or un-plated wires
- Simple strip and insert for wire loading, with easy twist and pull for wire removal

ELECTRICAL

- Voltage Rating: 300 VAC
- Current Rating: See matrix below

ENVIRONMENTAL

- Operating Temperature: -40°C to +125°C

MECHANICAL

- Contact Material: Copper Alloy
- Contact Plating: Tin over Nickel
- Durability: 5 Cycles

HOW TO ORDER

00	9296	00X
Prefix	Series	Number of Ways
Code	No of Ways	Details
001	1	Page 2
002	2	Page 3
003	3	Page 4
004	4	Page 5
005	5	Page 6
006	6	Page 7

503

Wire Gauge Size

Code	Accepted Wire Gauge	Wire Insulation
503	Poke Home Through Board SMT	18AWG to 26AWG Max Insulation 2.2mm

X	X6
Insulator Color	Plating Option
9 = White - Standard	06 = Tin Plated



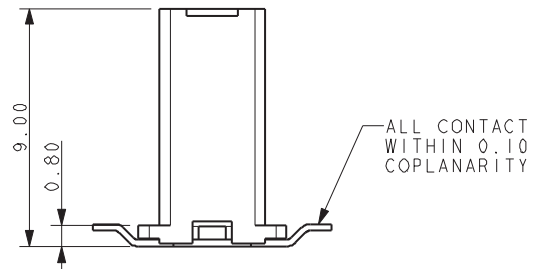
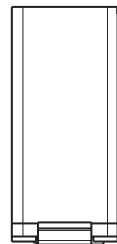
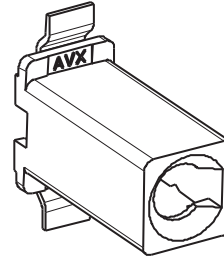
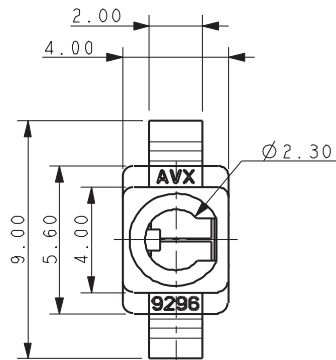
CURRENT RATING

18AWG	20AWG	22AWG	24AWG	26AWG
7A	6A	5A	4A	3A

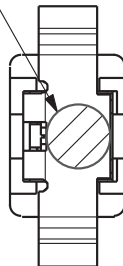
Poke Home: Vertical Through Board WTB **AVX**

Series 9296

9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 1 WAY



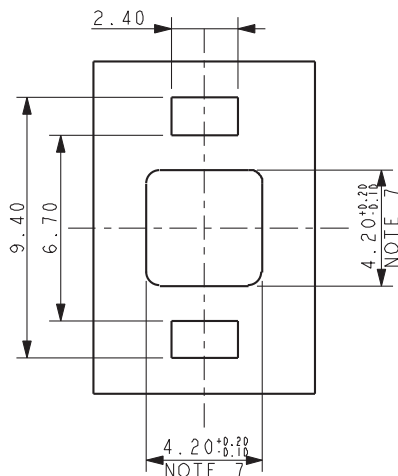
PICK AND PLACE
2.1mm DIAMETER



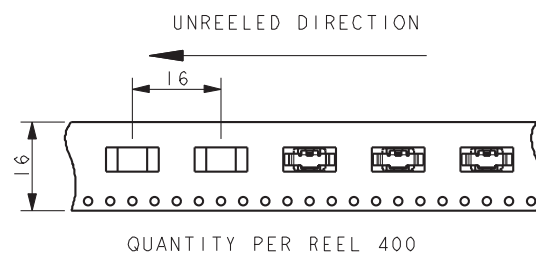
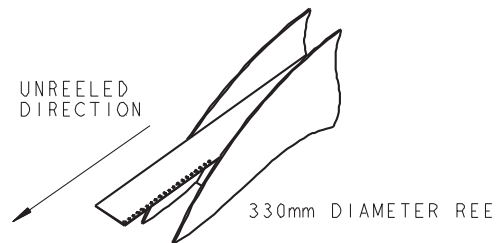
NOTES:

1. THROUGH BOARD SMT MOUNT 1 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

SUGGESTED PCB LAYOUT



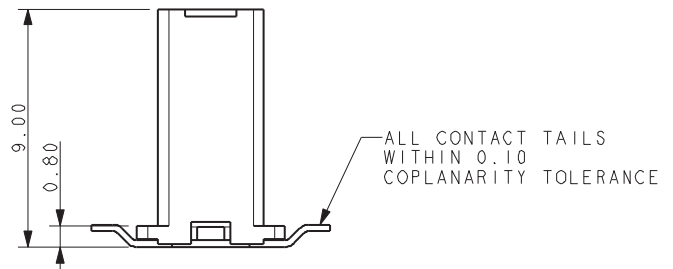
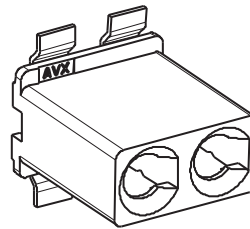
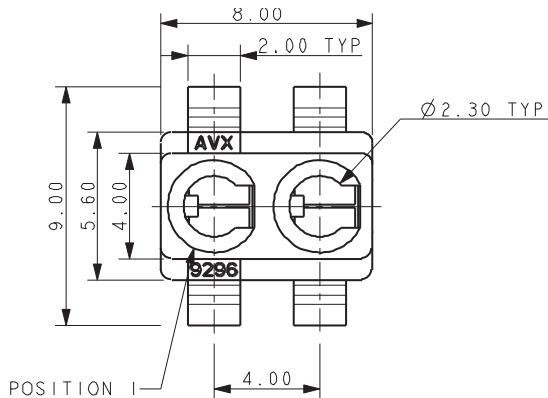
PACKING DETAILS



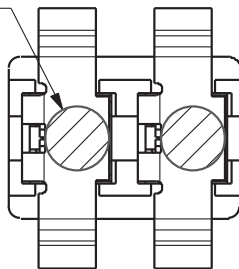
Poke Home: Vertical Through Board WTB **AVX**

Series 9296

9296 TOP MOUNT POKE HOME CONNECTOR 2 WAY



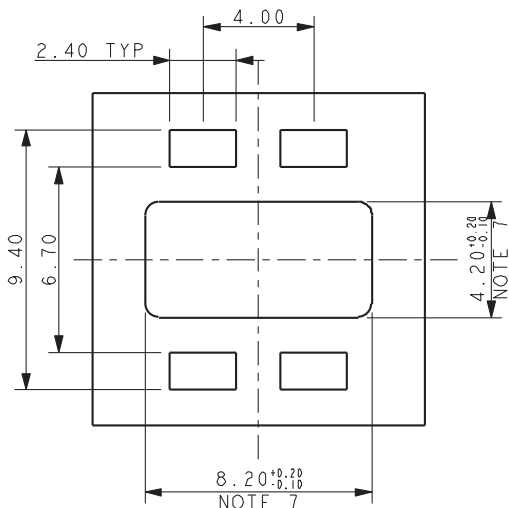
PICK AND PLACE
2.1mm DIAMETER



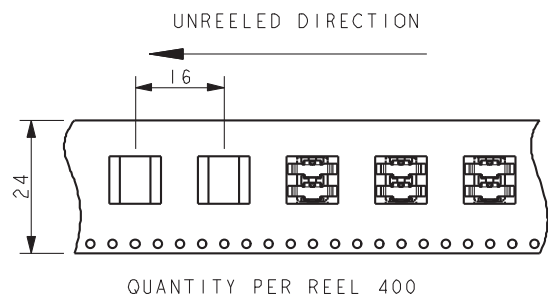
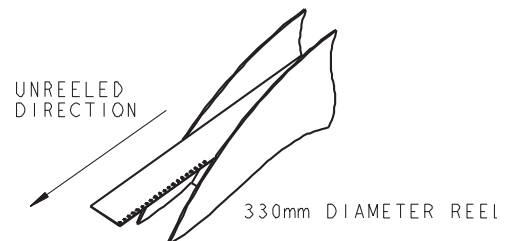
NOTES:

1. THROUGH BOARD SMT MOUNT 2 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

SUGGESTED PCB LAYOUT



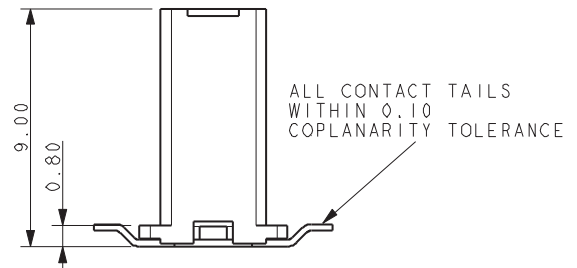
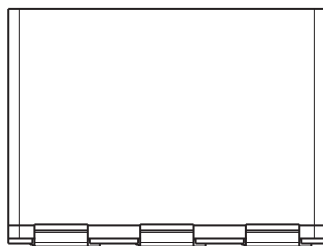
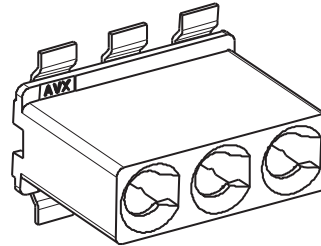
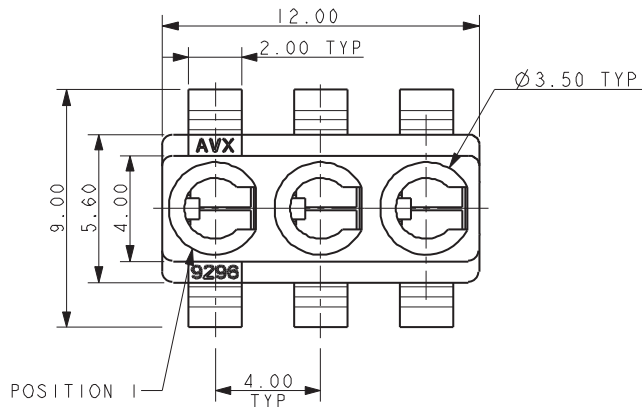
PACKING DETAILS



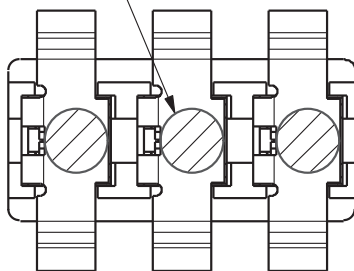
Poke Home: Vertical Through Board WTB **AVX**

Series 9296

9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 3 WAY



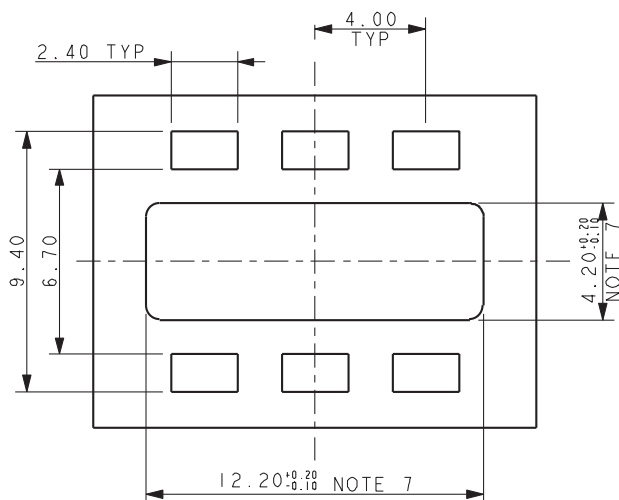
PICK AND PLACE
2.1mm DIAMETER



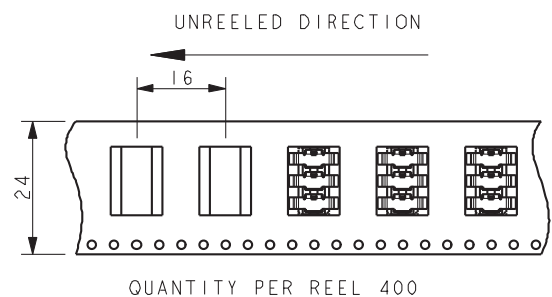
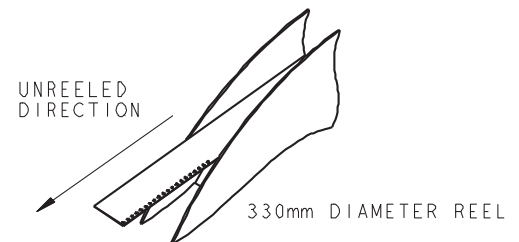
NOTES:

1. THROUGH BOARD SMT MOUNT 3 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

SUGGESTED PCB LAYOUT



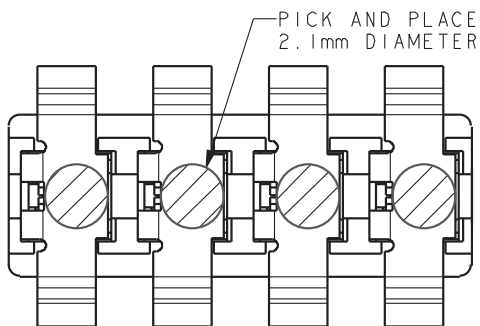
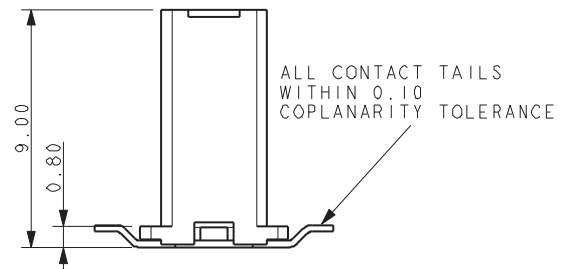
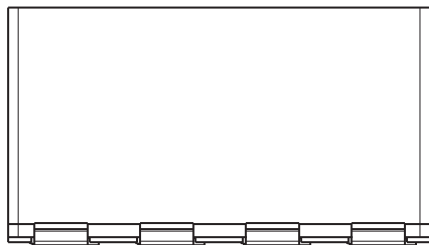
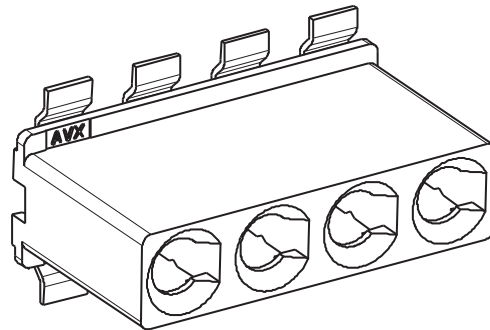
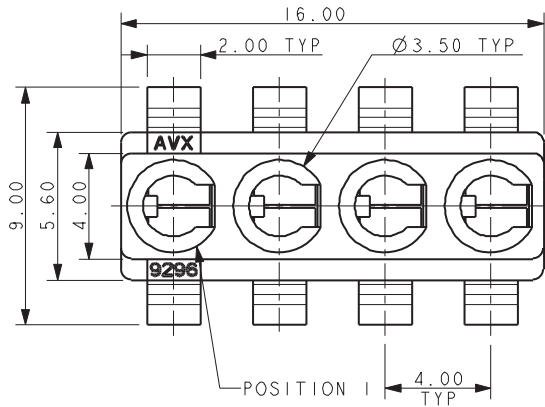
PACKING DETAILS



Poke Home: Vertical Through Board WTB **AVX**

Series 9296

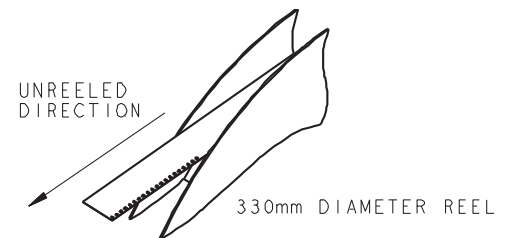
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 4 WAY



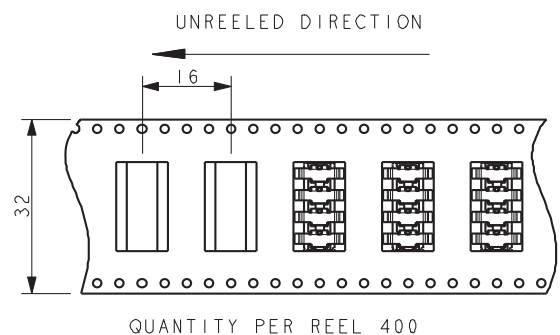
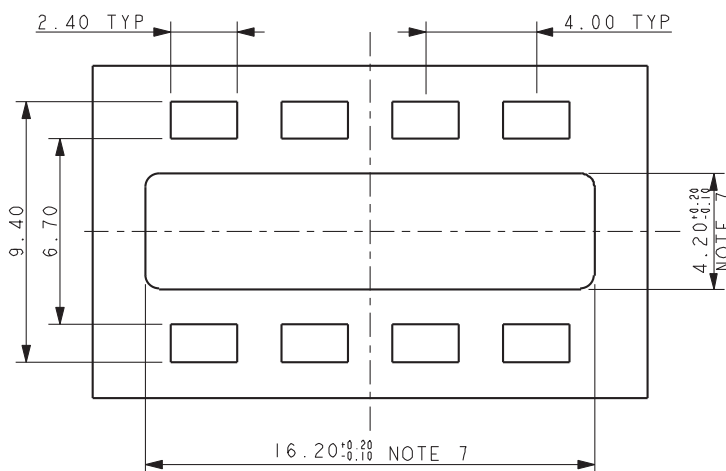
NOTES:

1. THROUGH BOARD SMT MOUNT 4 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

PACKING DETAILS



SUGGESTED PCB LAYOUT

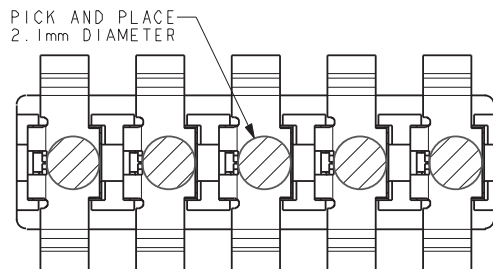
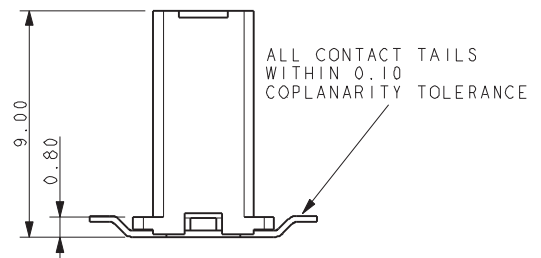
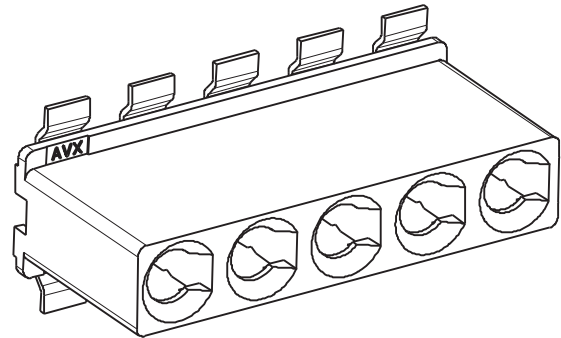
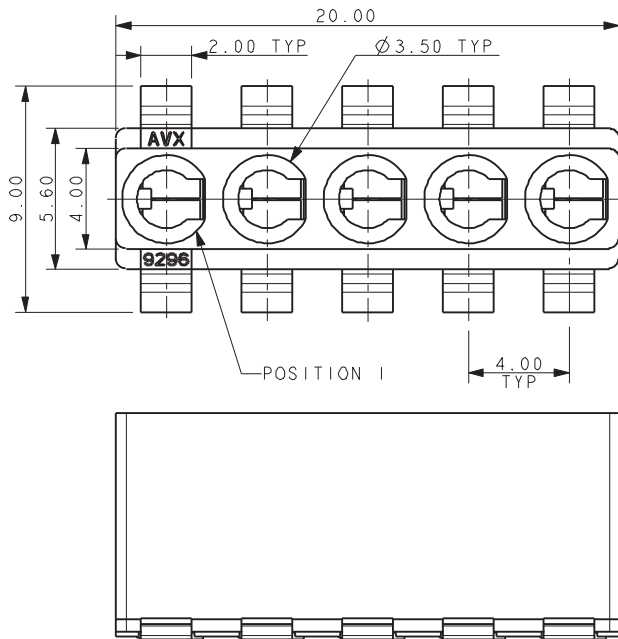


AVX

Poke Home: Vertical Through Board WTB **AVX**

Series 9296

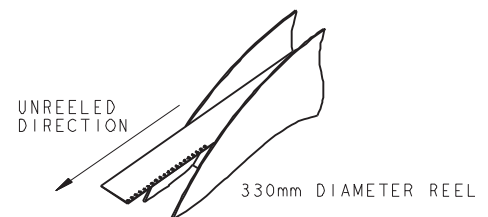
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 5 WAY



NOTES:

1. THROUGH BOARD SMT MOUNT 5 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

PACKING DETAILS

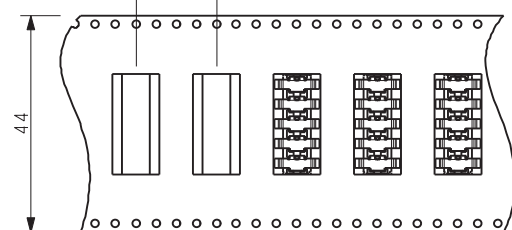


UNREELED DIRECTION

330mm DIAMETER REEL

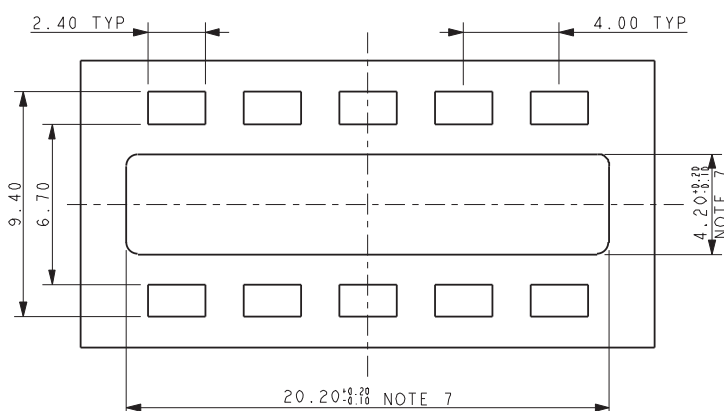
UNREELED DIRECTION

16



QUANTITY PER REEL 400

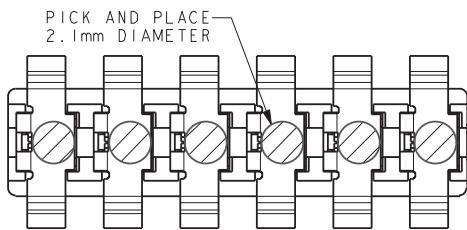
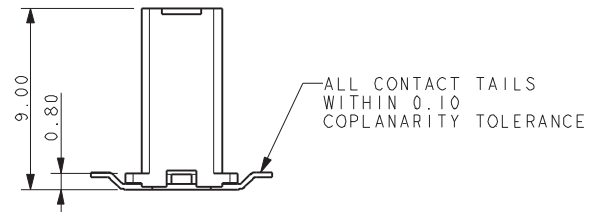
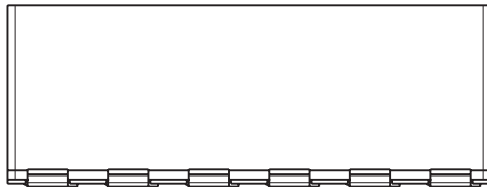
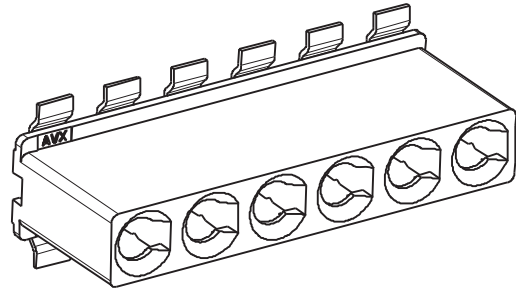
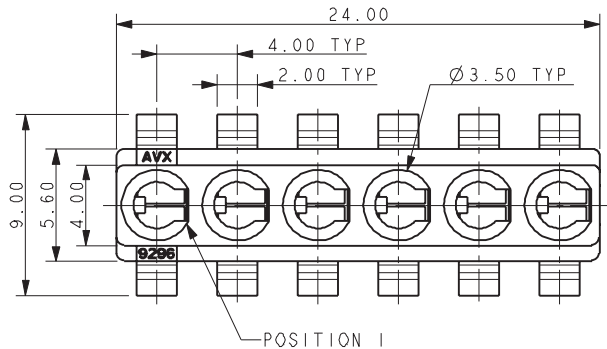
SUGGESTED PCB LAYOUT



Poke Home: Vertical Through Board WTB **AVX**

Series 9296

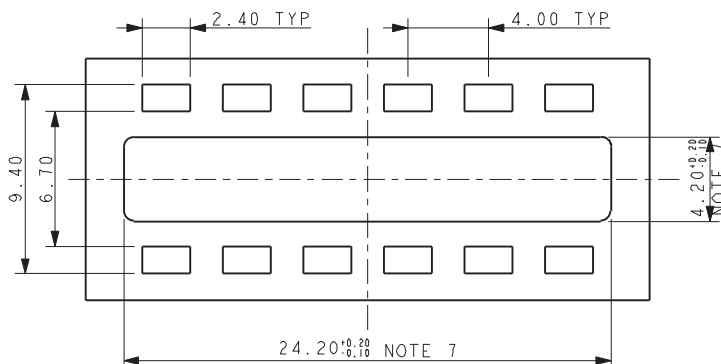
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 6 WAY



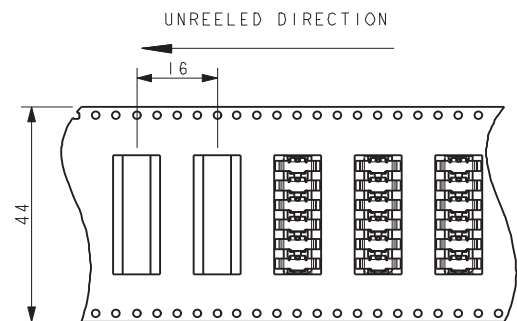
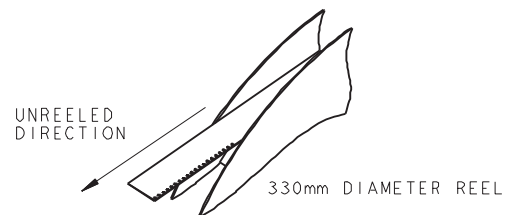
NOTES:

1. THROUGH BOARD SMT MOUNT 6 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 1.
4. CONTACT: TIN PLATE COPPER ALLOY.
5. PACKING IN TAPE AND REEL. QTY PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.

SUGGESTED PCB LAYOUT



PACKING DETAILS



QUANTITY PER REEL 400

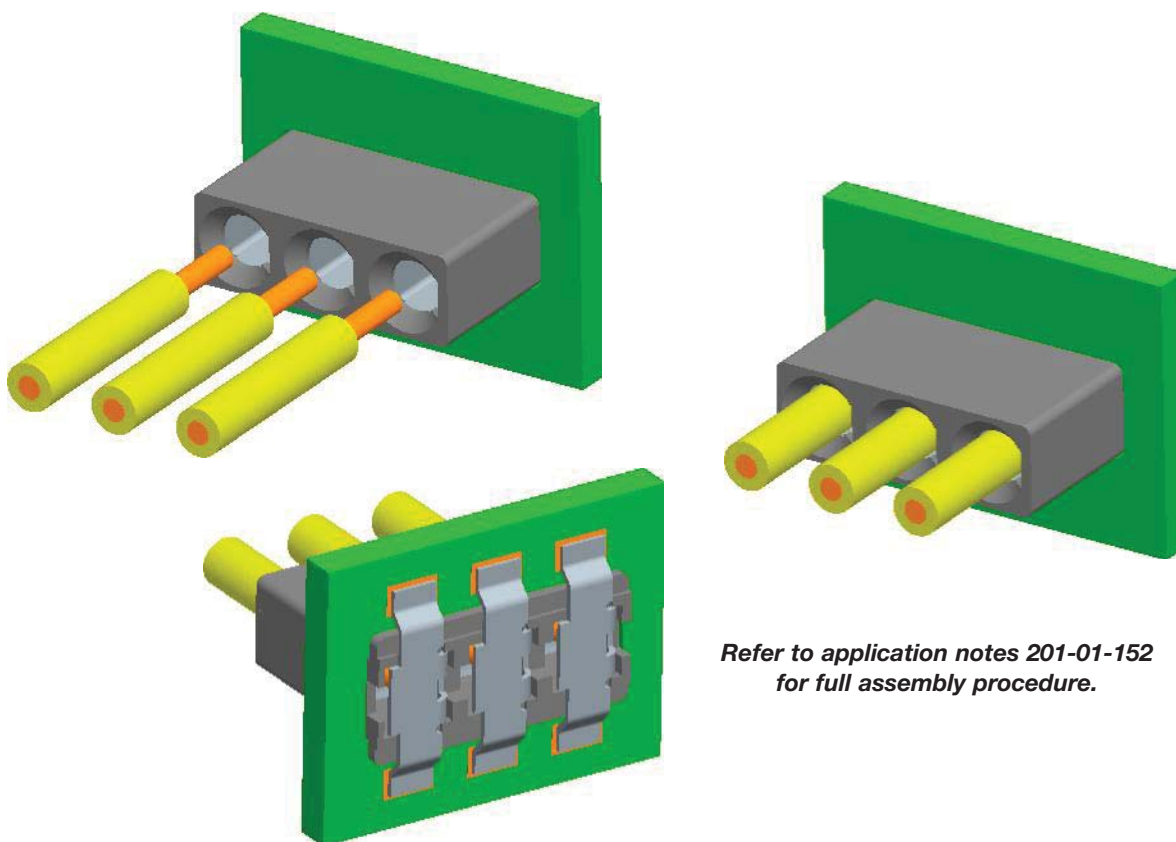
Poke Home: Vertical Through Board WTB **AVXX**

Series 9296

9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR ASSEMBLY

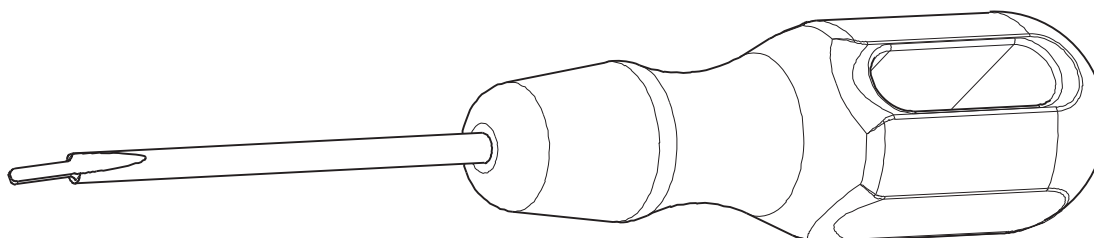


WIRE STRIP LENGTH



*Refer to application notes 201-01-152
for full assembly procedure.*

9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR WIRE EXTRACTION TOOL



06-9296-7003-01-000

*Refer to application notes 201-01-152
for full wire extraction procedure.*