

Poke-Home: Inverted Thru Board

18-26 AWG: WTB

00-9296



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to develop innovative connectors for the industrial electronics market that provide significant benefits over existing, outdated connector solutions.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 tine, 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: 600 VAC 1 way
300 VAC 2 - 6 way
- 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
		001 = 1
		002 = 2
		003 = 3
		004 = 4
		005 = 5
		006 = 6

	503
	Wire Gauge Size
Code	Accepted Wire Gauge
503	18 - 26 AWG Solid or Stranded
	Max Insulation
	2.2mm

X	06
Insulator Color	Plating Option
All Sizes	06 = Tin Plated
9 = UL White (Standard)	
8 = UL Black (Special Order)	
One Way Only (Special Order)	
2 = UL Brown	
3 = UL Blue	
4 = UL Yellow	
5 = UL Red	
6 = UL Green	
7 = UL Orange	



CURRENT RATING

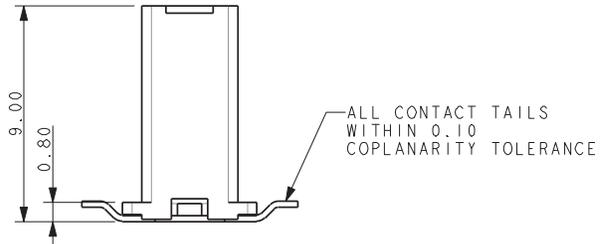
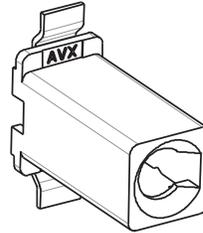
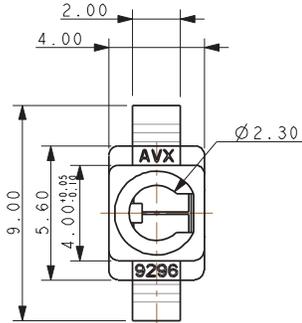
18AWG	20AWG	22AWG	24AWG	26AWG
7A	6A	5A	4A	3A

Certification: UL File #E90723

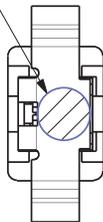
Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 1 WAY



PICK AND PLACE
2.1mm DIAMETER

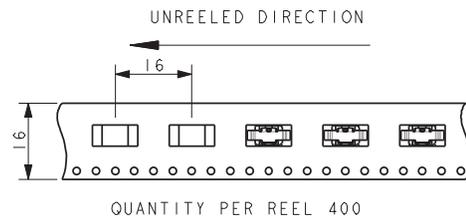
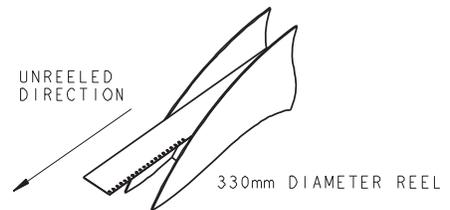
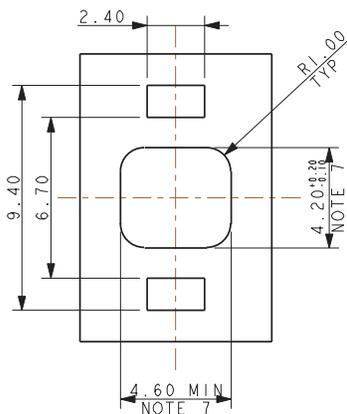


NOTES:

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 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

PACKING DETAILS

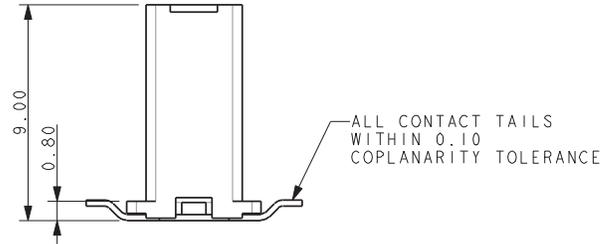
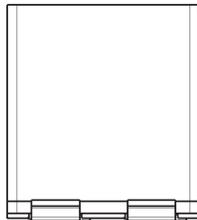
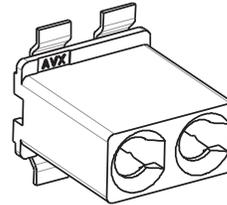
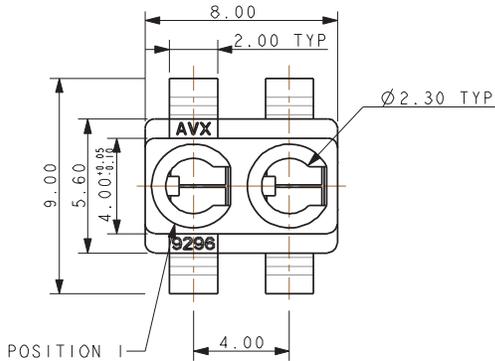
SUGGESTED PCB LAYOUT



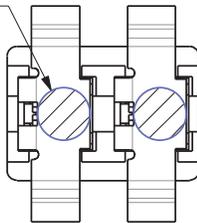
Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 2 WAY



PICK AND PLACE
2.1mm DIAMETER

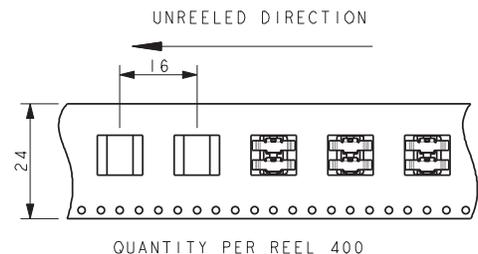
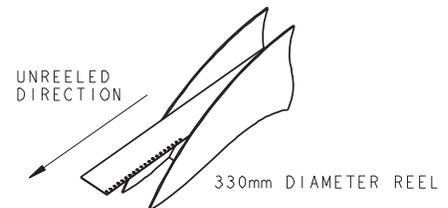
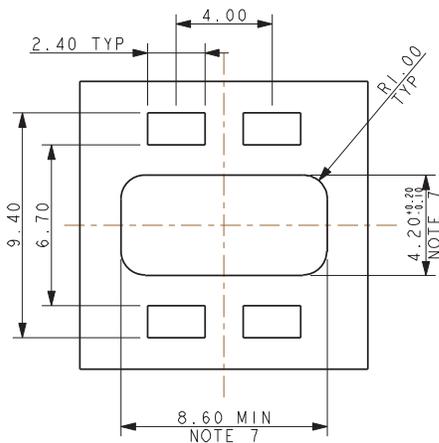


NOTES:

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 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

PACKING DETAILS

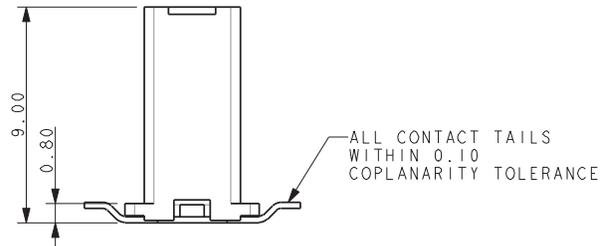
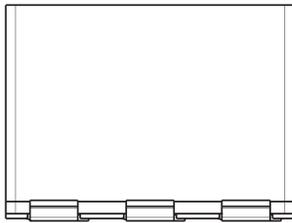
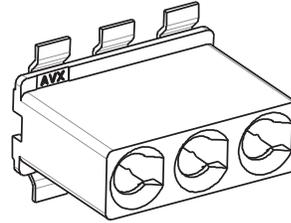
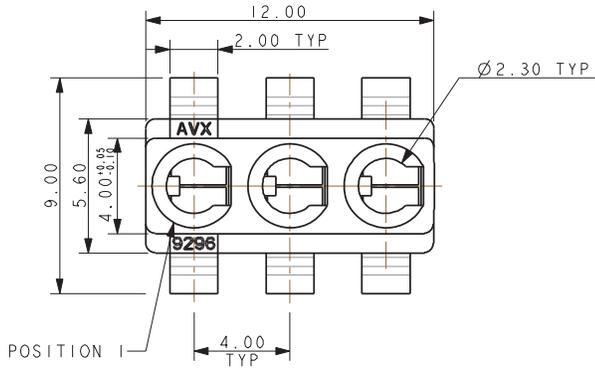
SUGGESTED PCB LAYOUT



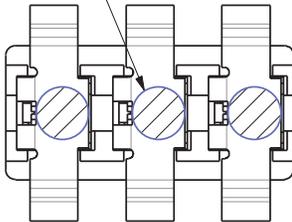
Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 3 WAY



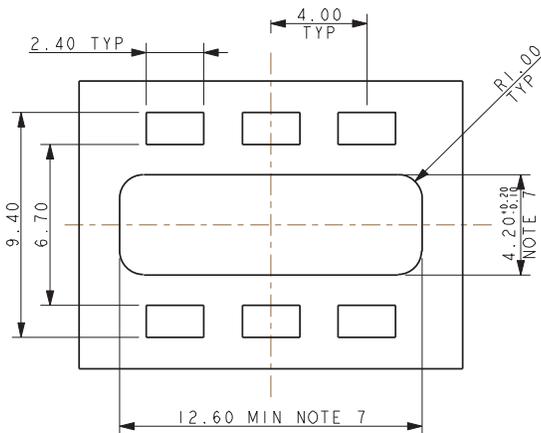
PICK AND PLACE
2.1mm DIAMETER



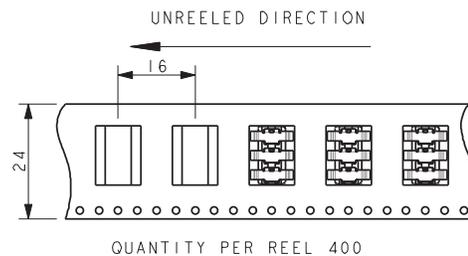
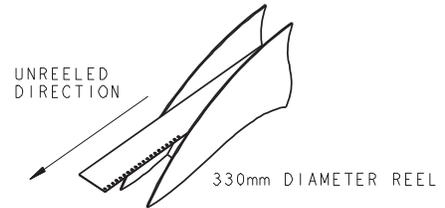
NOTES:

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 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

SUGGESTED PCB LAYOUT



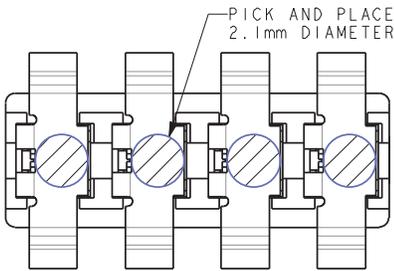
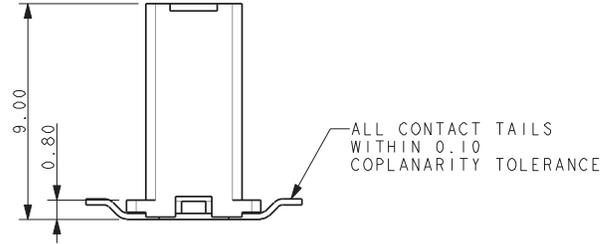
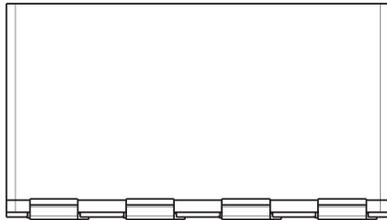
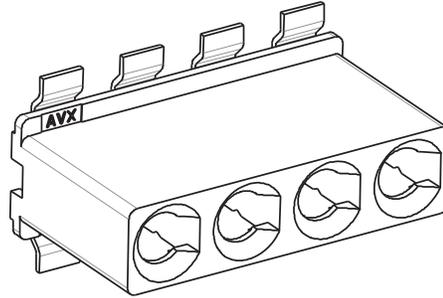
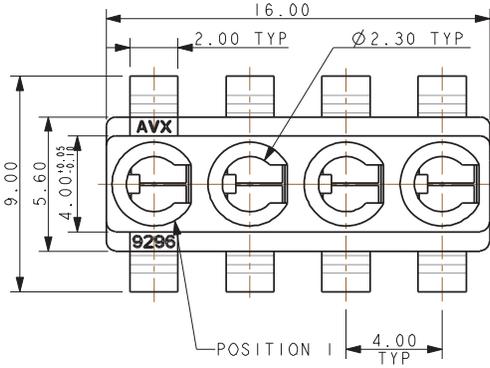
PACKING DETAILS



Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 4 WAY

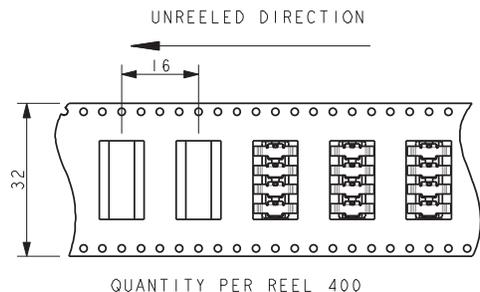
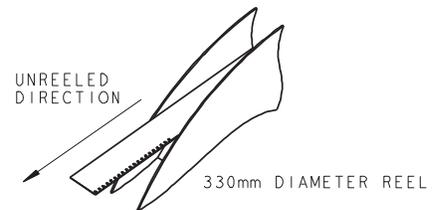
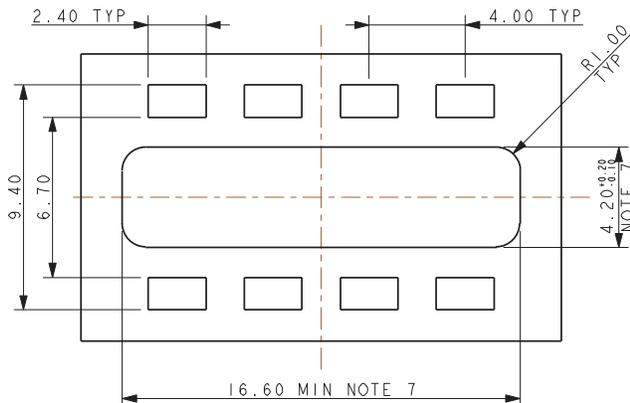


NOTES:

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 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

PACKING DETAILS

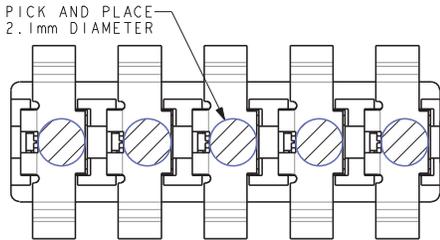
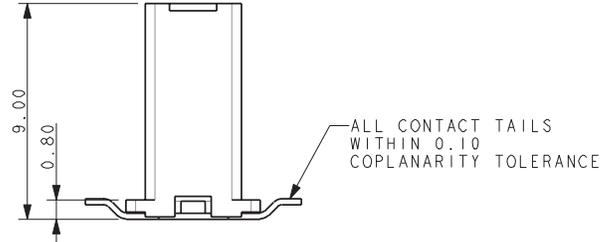
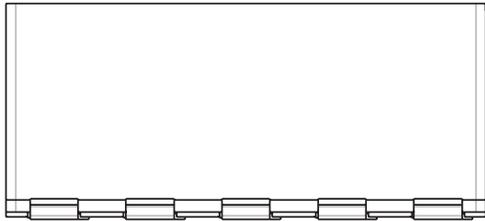
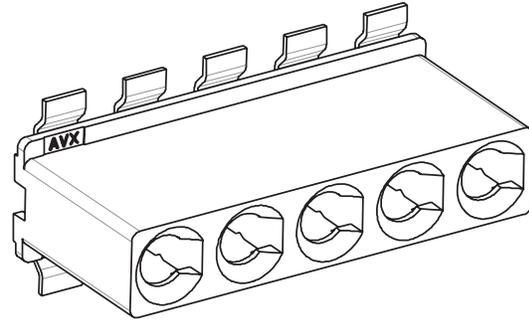
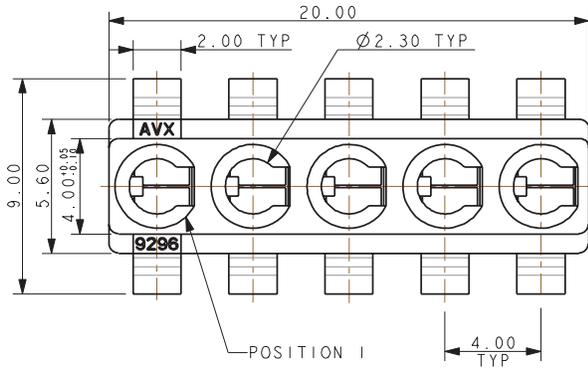
SUGGESTED PCB LAYOUT



Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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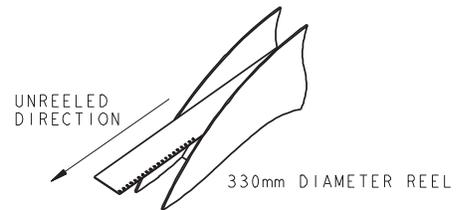
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 5 WAY



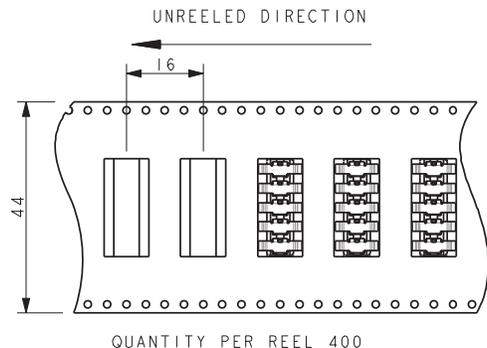
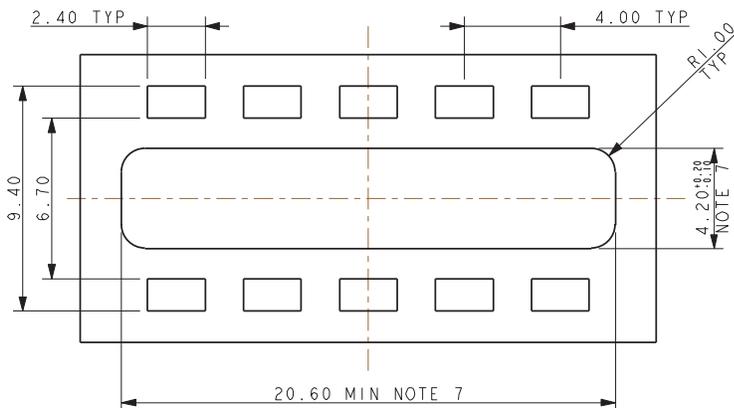
NOTES:

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 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ±0.20.
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

PACKING DETAILS



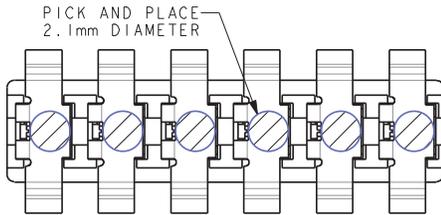
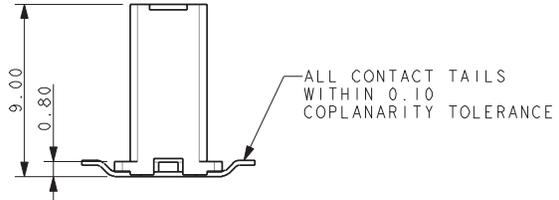
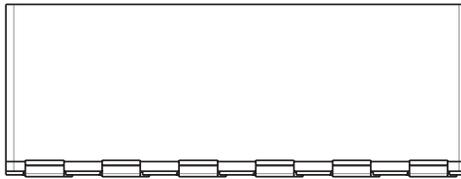
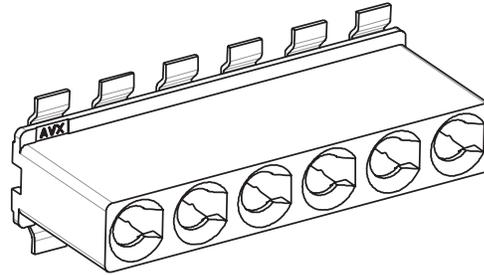
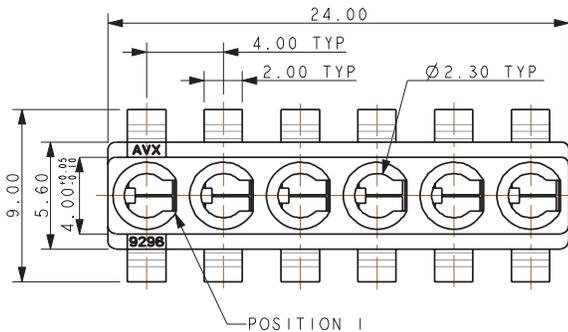
SUGGESTED PCB LAYOUT



Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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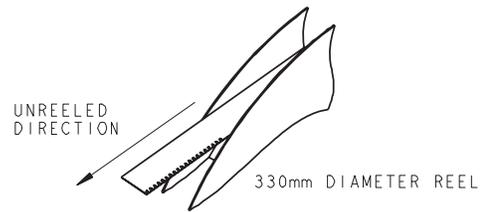
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR 6 WAY



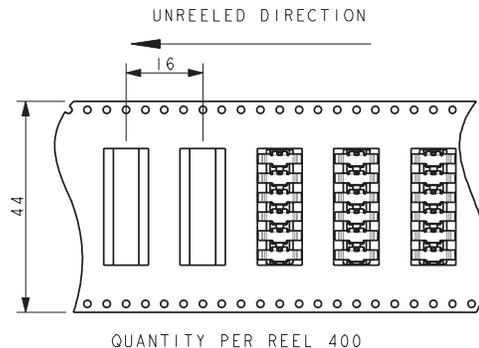
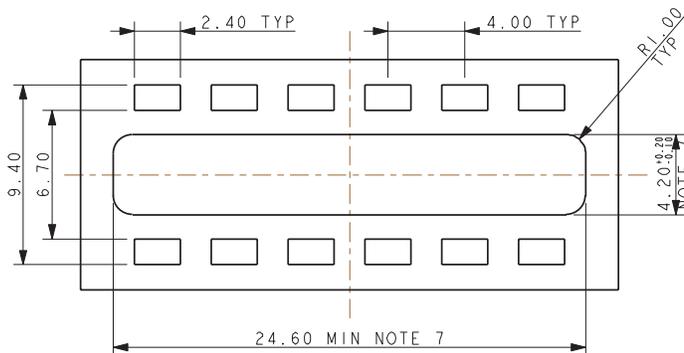
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1. THROUGH BOARD SMT MOUNT 6 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-151 AND APPLICATION NOTES 201-01-152.
2. SUITABLE FOR WIRES 18AWG TO 26AWG. MAXIMUM INSULATION 2.20MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 101.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY. PER REEL 400, 330MM REEL.
6. GENERAL TOLERANCE ±0.20.
7. CLEARANCE HOLE FOR CONNECTOR.
8. UL REFERENCE E90723.

PACKING DETAILS



SUGGESTED PCB LAYOUT



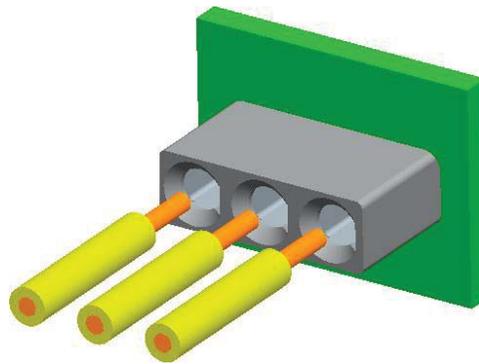
Poke-Home: Inverted Thru Board 18-26 AWG: WTB

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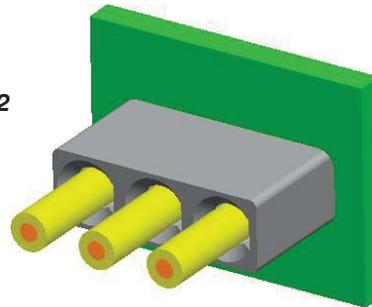
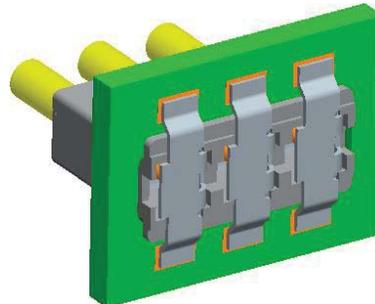
9296 THROUGH BOARD MOUNT POKE HOME CONNECTOR ASSEMBLY



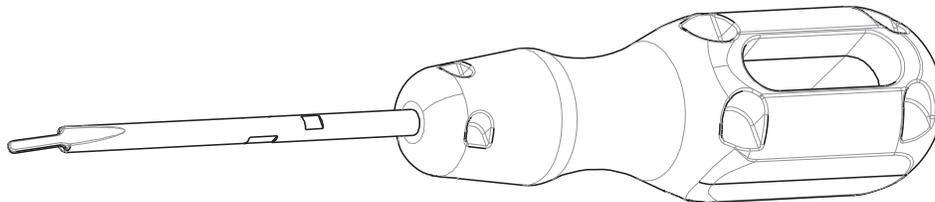
WIRE STRIP LENGTH



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



THROUGH BOARD MOUNT POKE HOME CONNECTOR WIRE EXTRACTION TOOL



06-9296-7003-01-000 – PLASTIC TOOL
06-9296-7004-03-000 – METAL TOOL

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