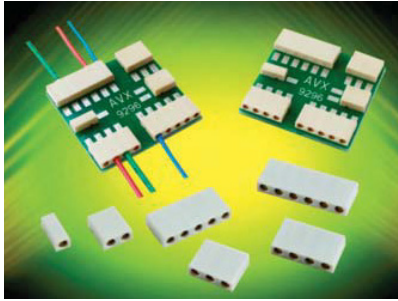


POKE-HOME: LOW PROFILE HORIZONTAL

20-26 AWG: 9296-200



General Information



The new 9296 series connector provides a quick and reliable wire-to-board termination in a sleek 3.0mm pitch by 2.5mm high SMT package for a broad range of industrial and commercial applications. With almost every product on the market having to deal with a small number of discrete wires connecting components to a PCB, the 9296 connector series meets this challenge by simply stripping the wire and inserting them into a 1 to 6 position connector. This makes the connector very cost effective and termination friendly within the factory as well as in the field by electrical installers.

Developed for harsh industrial applications, the connector integrates the already proven 2mm dual beam poke-home contact into a connector housing. The high spring force Phosphor Bronze contact accepts a wide range (20-26AWG solid or stranded) of wire to accommodate any wire combination within a single connector.

APPLICATIONS

- Machine Controls: motors, drives, solenoids, sensors, fans and pumps
- Commercial Buildings: controls, security, fire and sensors
- Smart Grid: meters, breakers and panels
- SSL/LED: bulbs, fixtures, signage and streetlights
- Application notes: refer to 201-01-167

FEATURES AND BENEFITS

- Simple strip and poke-home wire insertion with easy twist and pull wire extraction
- 2.5mm height achieves the lowest height possible for this AWG range
- Accepts 20-26 AWG solid and stranded wires
- High spring force dual beam box contact provides maximum mechanical stability and wire retention
- UL approved
- Halogen free

ELECTRICAL

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

ENVIRONMENTAL

- Operating Temperature: -40°C to +130°C

MECHANICAL

- Insulator Material: Glass-Filled Nylon 46; UL94V0
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel
- Durability: 3 Cycles

HOW TO ORDER

00	9296	00X	2X	2	X	X	6
Prefix	Series	Number of Ways	Description	Wire Gauge Size	Insulator Color	Halogen Free	Plating Options
		001 = 1 002 = 2 003 = 3 004 = 4 005 = 5 006 = 6	20 = Horizontal SMT Mount Poke Home Connector 21 = Horizontal SMT Mount Poke Home Connector for pass through mating pins	20AWG to 26AWG Max ø 1.60mm	All Sizes 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	0 = No 1 = Yes	6 = Pure Tin over Nickel



CURRENT RATING

	20AWG	22AWG	24AWG	26AWG
UL	8A	7A	6A	5A
cUL	6A	5A	3.75A	3.75A

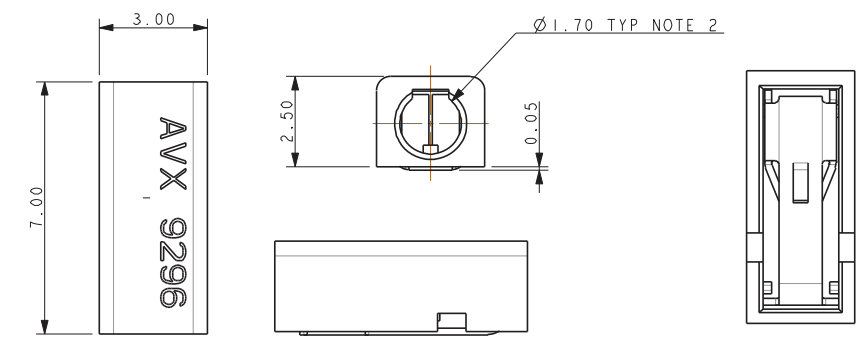
Certification: UL File #E90723

POKE-HOME: LOW PROFILE HORIZONTAL
20-26 AWG: 9296-200



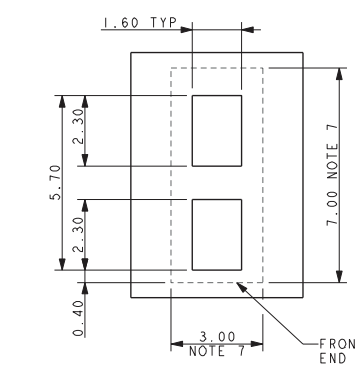
1 Position

9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 1 WAY

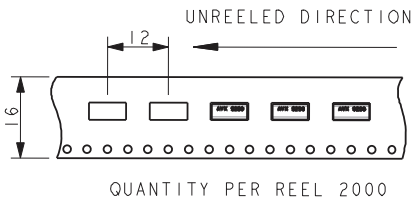
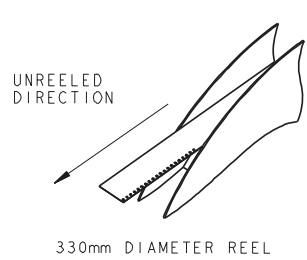


- NOTES:
- 1. HORIZONTAL SMT MOUNT 1 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-166 AND APPLICATION NOTES 201-01-167.
 - 2. SUITABLE FOR WIRES 20AWG TO 26AWG, MAXIMUM INSULATION 1.60MM DIAMETER.
 - 3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-O, COLOR SEE PAGE 122.
 - 4. CONTACT: TIN PLATED COPPER ALLOY.
 - 5. PACKING IN TAPE AND REEL, QTY PER REEL 2000, 330MM REEL.
 - 6. GENERAL TOLERANCE ± 0.20 .
 - 7. OUTLINE OF CONNECTOR.
 - 8. UL REFERENCE E90723 (US AND CANADA).

SUGGESTED PCB LAYOUT



PACKING DETAILS



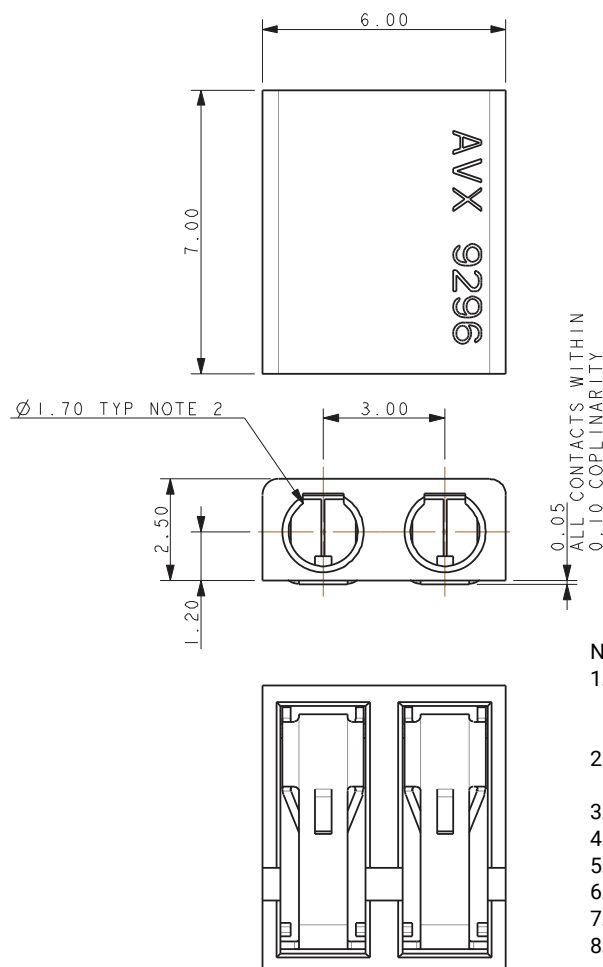
POKE-HOME: LOW PROFILE HORIZONTAL

20-26 AWG: 9296-200

2 Position



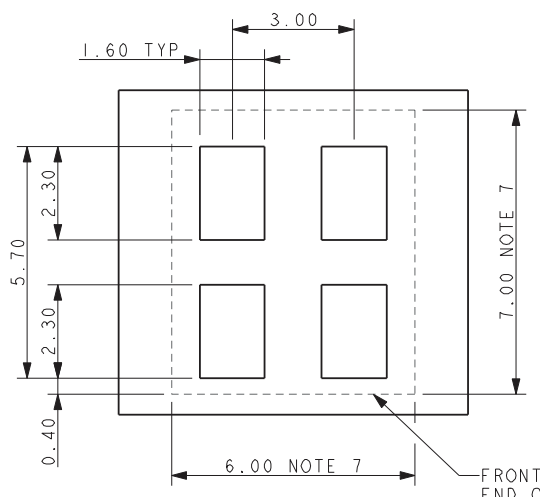
9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 2 WAY



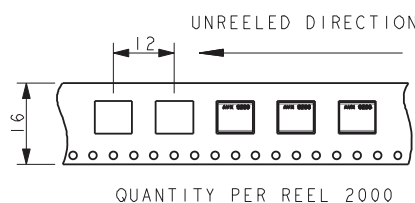
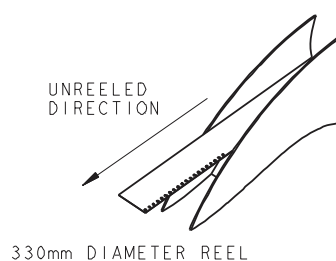
NOTES:

1. HORIZONTAL SMT MOUNT 2 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-166 AND APPLICATION NOTES 201-01-167.
2. SUITABLE FOR WIRES 20AWG TO 26AWG, MAXIMUM INSULATION 1.60MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 122.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY PER REEL 2000, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

SUGGESTED PCB LAYOUT



PACKING DETAILS



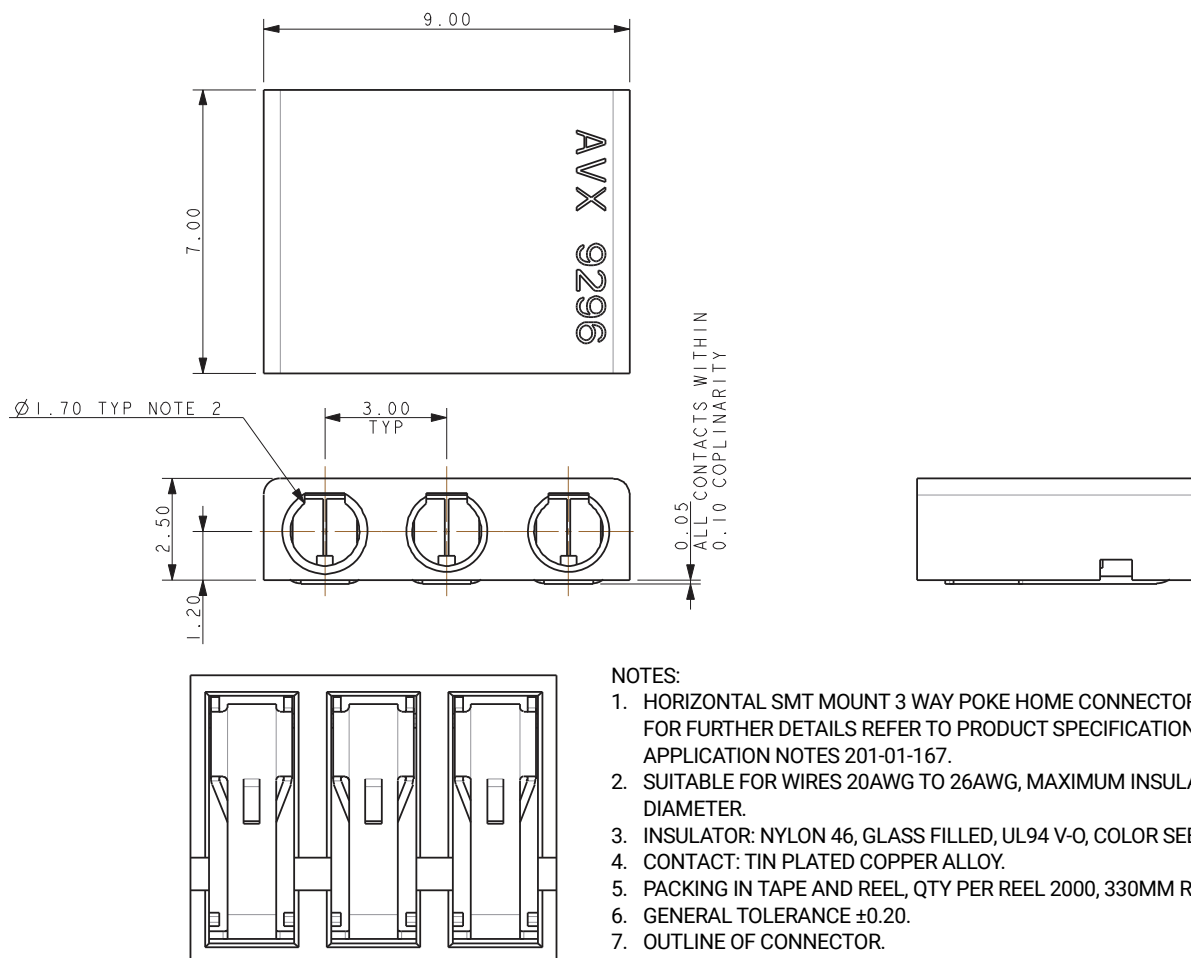
POKE-HOME: LOW PROFILE HORIZONTAL

20-26 AWG: 9296-200

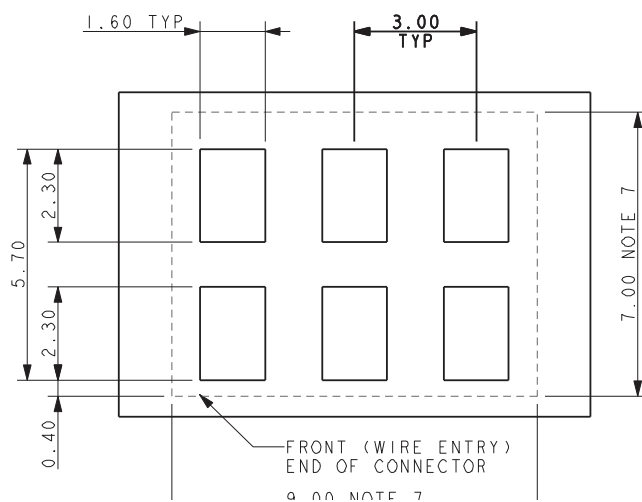


3 Position

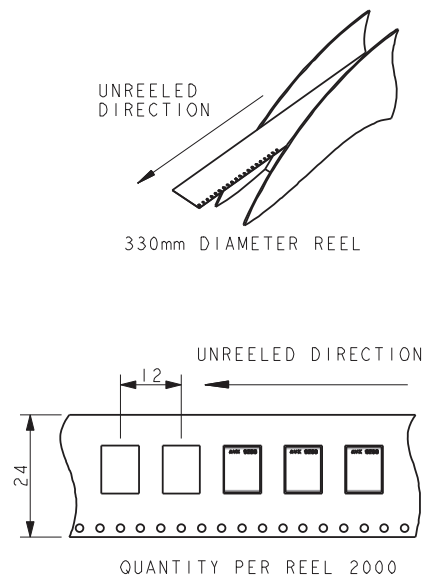
9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 3 WAY



SUGGESTED PCB LAYOUT



PACKING DETAILS

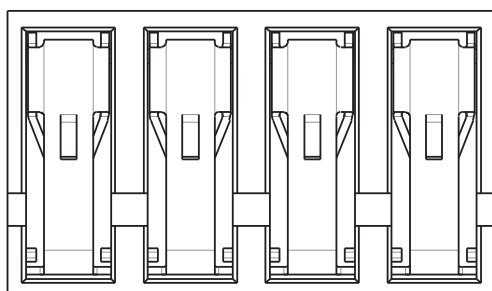
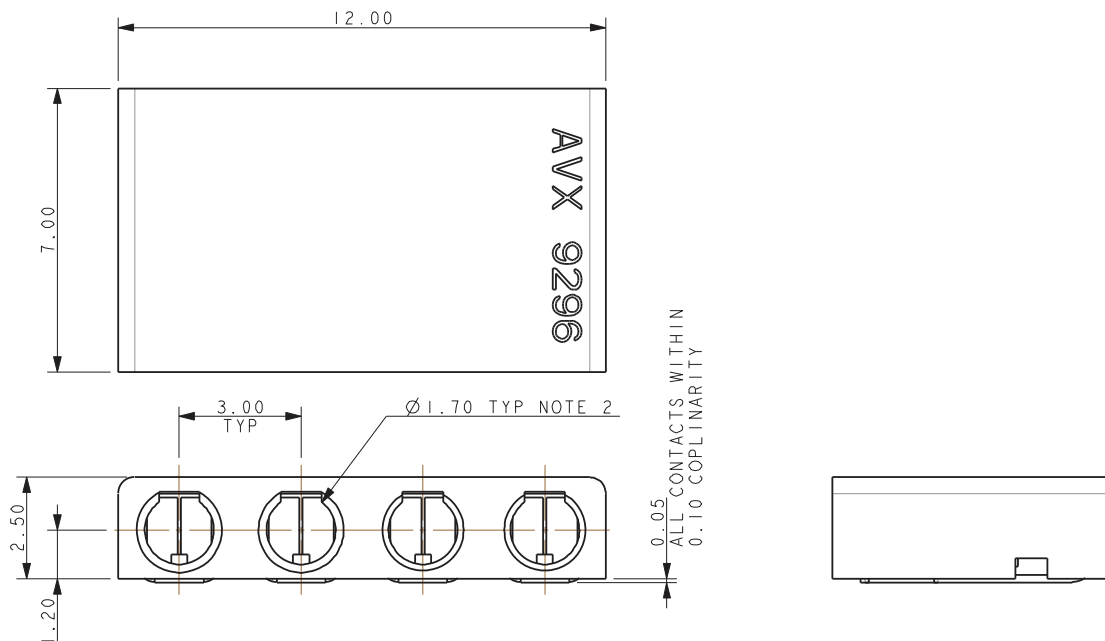


POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG:9296-200

4 Position



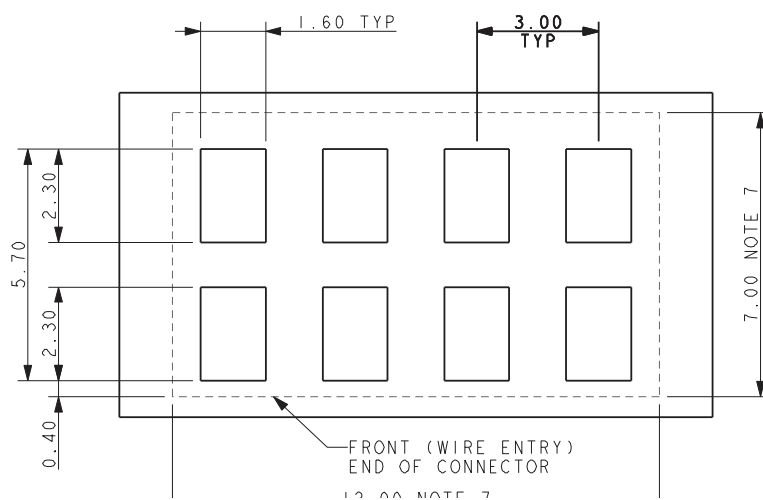
9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 4 WAY



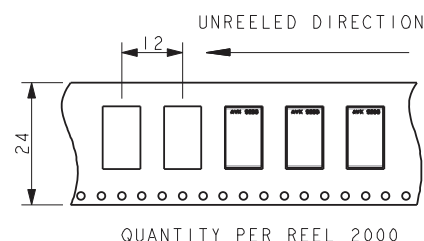
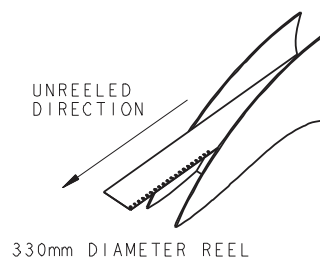
NOTES:

1. HORIZONTAL SMT MOUNT 4 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-166 AND APPLICATION NOTES 201-01-167.
2. SUITABLE FOR WIRES 20AWG TO 26AWG, MAXIMUM INSULATION 1.60MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 122.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY PER REEL 2000, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

SUGGESTED PCB LAYOUT



PACKING DETAILS



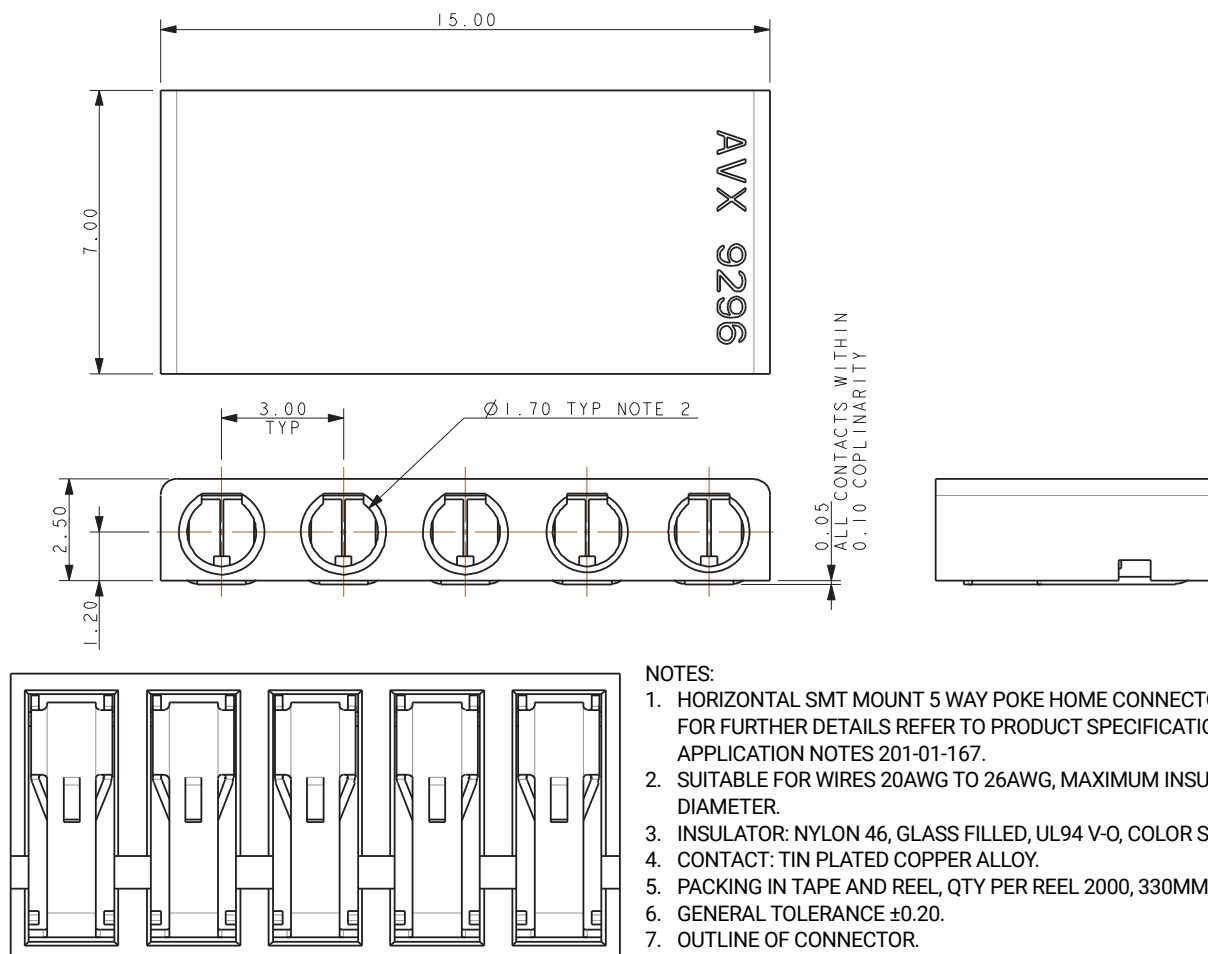
POKE-HOME: LOW PROFILE HORIZONTAL

20-26 AWG: 9296-200

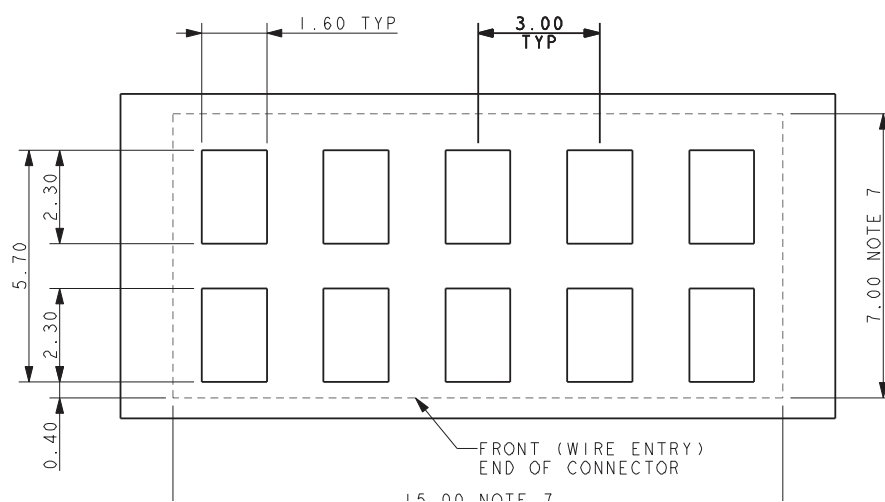


5 Position

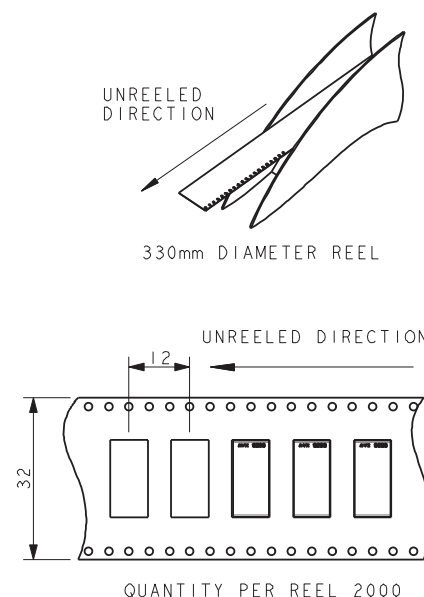
9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 5 WAY



SUGGESTED PCB LAYOUT



PACKING DETAILS

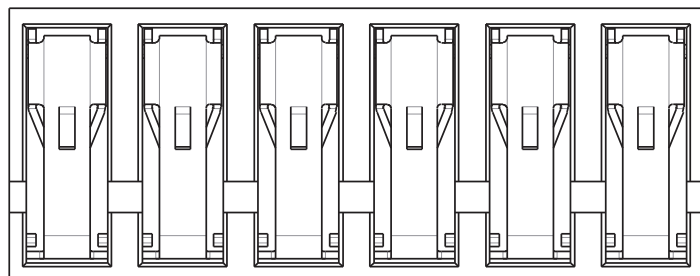


6 Position



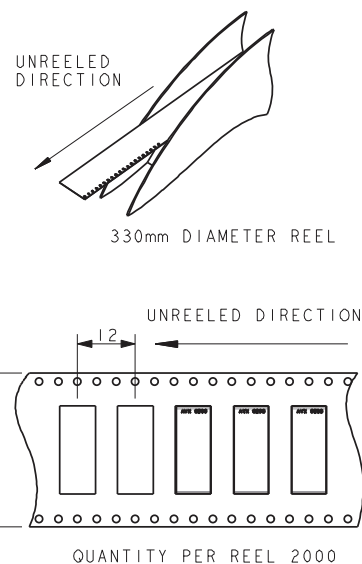
Technical drawing of the AVX 9296 component, showing dimensions and features:

- Top View:** Overall dimensions are 18.00 (width) and 7.00 (height). The part number "AVX 9296" is printed vertically on the right side.
- Side View:** Shows the component's profile with a total height of 2.50. The mounting tab height is 1.20. The distance between the centers of the contacts is 3.00 TYP.
- End View:** Shows the contact pads with a diameter of $\varnothing 1.70$ TYP, as noted in Note 2.
- Notes:**
 - ALL CONTACTS WITHIN 0.10 COPLANARITY



1. HORIZONTAL SMT MOUNT 6 WAY POKE HOME CONNECTOR. FOR FURTHER DETAILS REFER TO PRODUCT SPECIFICATION 201-01-166 AND APPLICATION NOTES 201-01-167.
2. SUITABLE FOR WIRES 20AWG TO 26AWG, MAXIMUM INSULATION 1.60MM DIAMETER.
3. INSULATOR: NYLON 46, GLASS FILLED, UL94 V-0, COLOR SEE PAGE 122.
4. CONTACT: TIN PLATED COPPER ALLOY.
5. PACKING IN TAPE AND REEL, QTY PER REEL 2000, 330MM REEL.
6. GENERAL TOLERANCE ± 0.20 .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

Top view diagram of a 2x6 connector. The diagram shows a rectangular layout with dimensions and a grid of 12 rectangular components arranged in 2 rows and 6 columns. The overall width is 7.00 (NOTE 7). The overall height is 5.70. The distance between the centerlines of the two rows is 2.30. The distance between the centerlines of the six columns is 1.60 TYP. The distance between the centerlines of the two rows is 2.30. The distance between the centerlines of the six columns is 3.00 TYP. The distance from the front edge to the first row of components is 0.40. The distance from the front edge to the second row of components is 2.30. The distance from the front edge to the last row of components is 2.30. The distance from the front edge to the last column of components is 3.00 TYP. The front edge is labeled "FRONT (WIRE ENTRY) END OF CONNECTOR".

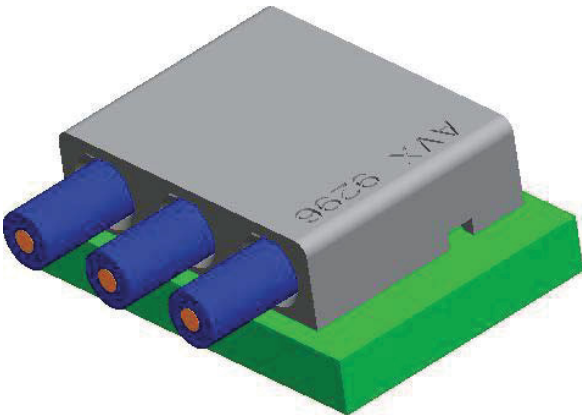
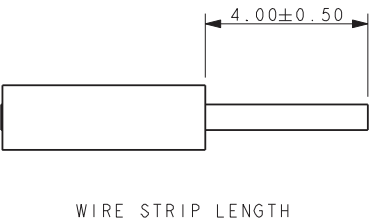


POKE-HOME: LOW PROFILE HORIZONTAL
20-26 AWG: 9296-200

Assembly



9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – ASSEMBLY



REFER TO APPLICATION NOTES 201-01-167
FOR FULL ASSEMBLY PROCEDURE

