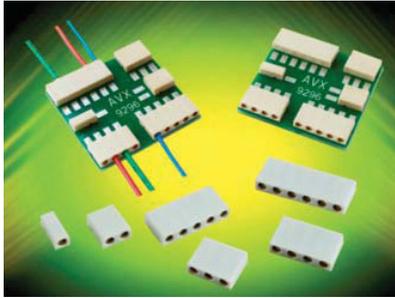


# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200



## 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

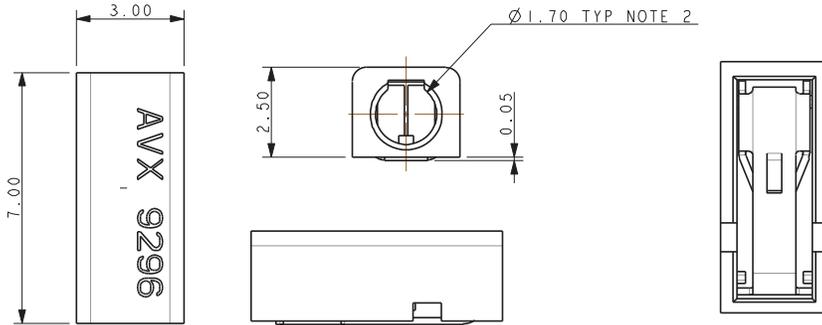
Certification: UL File #E90723

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



## 1 Position

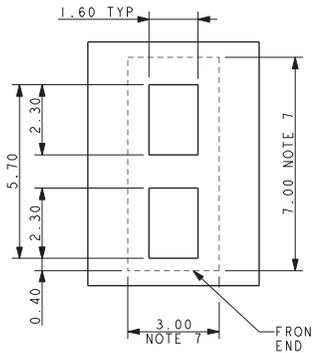
### 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 1 WAY



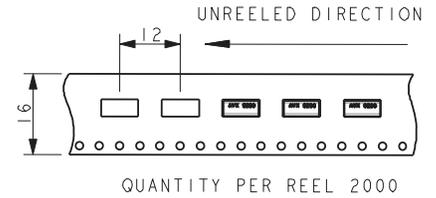
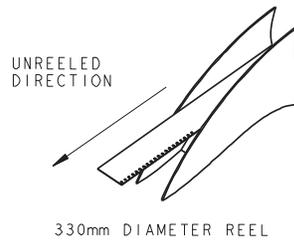
#### NOTES:

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-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  $\pm 0.20$ .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

### SUGGESTED PCB LAYOUT



### PACKING DETAILS

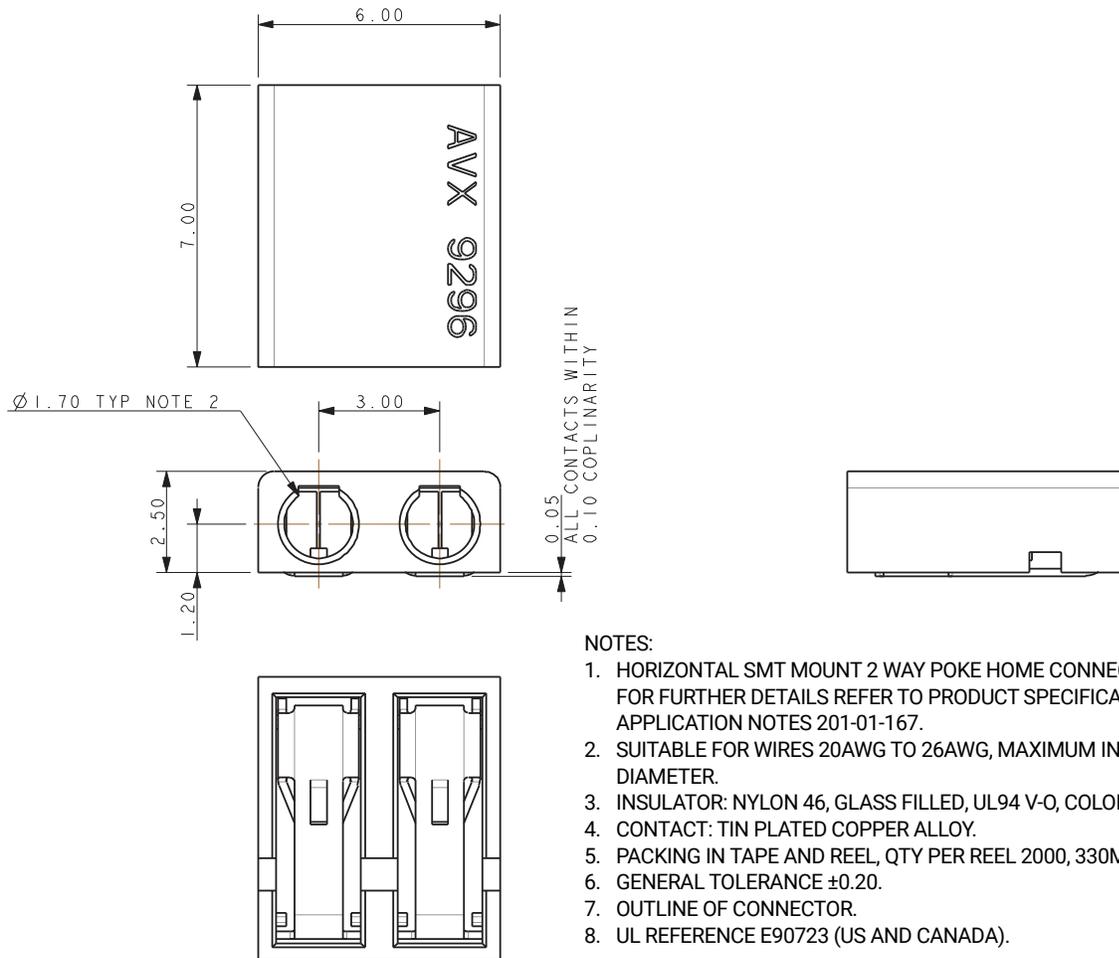


# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200



2 Position

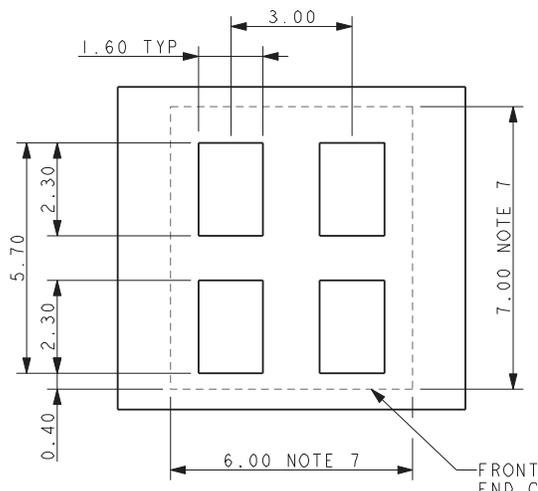
## 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 2 WAY



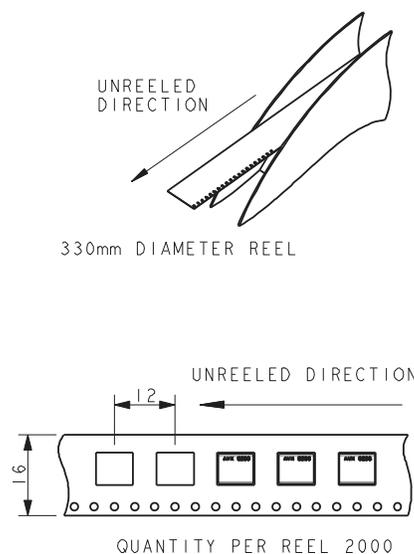
### NOTES:

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  $\pm 0.20$ .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

### SUGGESTED PCB LAYOUT



### PACKING DETAILS

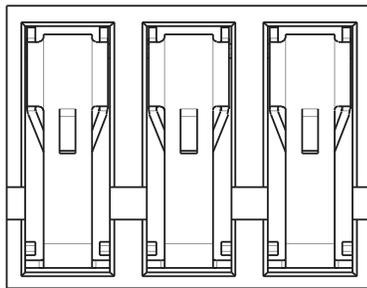
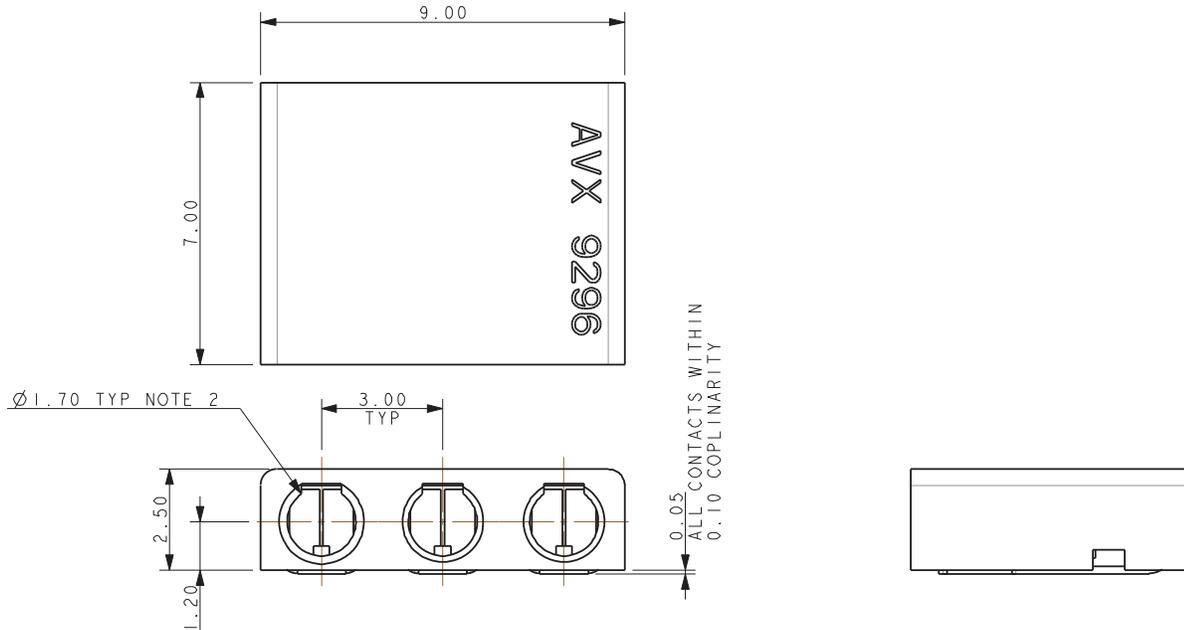


# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200



3 Position

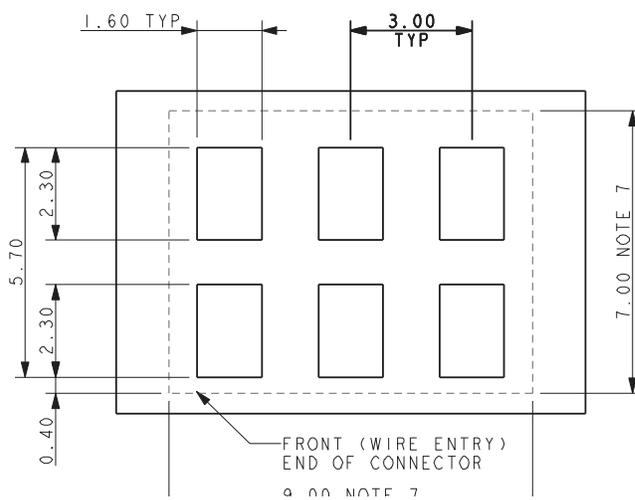
## 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 3 WAY



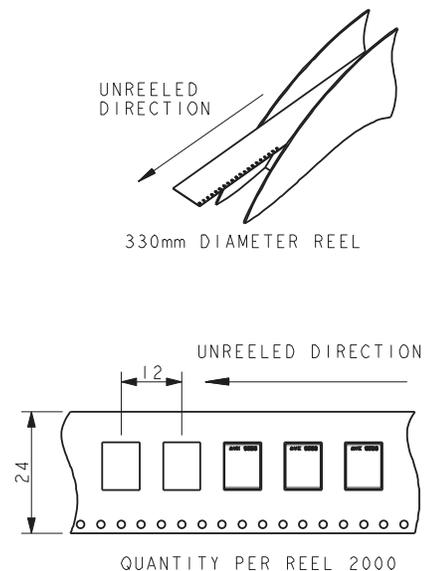
### NOTES:

1. HORIZONTAL SMT MOUNT 3 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  $\pm 0.20$ .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

### SUGGESTED PCB LAYOUT



### PACKING DETAILS



The Important Information/Disclaimer is incorporated in the catalog where these specifications came from or available online at [www.avx.com/disclaimer/](http://www.avx.com/disclaimer/) by reference and should be reviewed in full before placing any order.

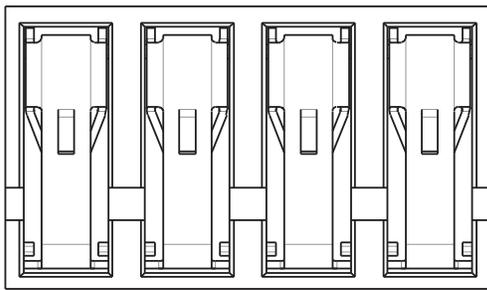
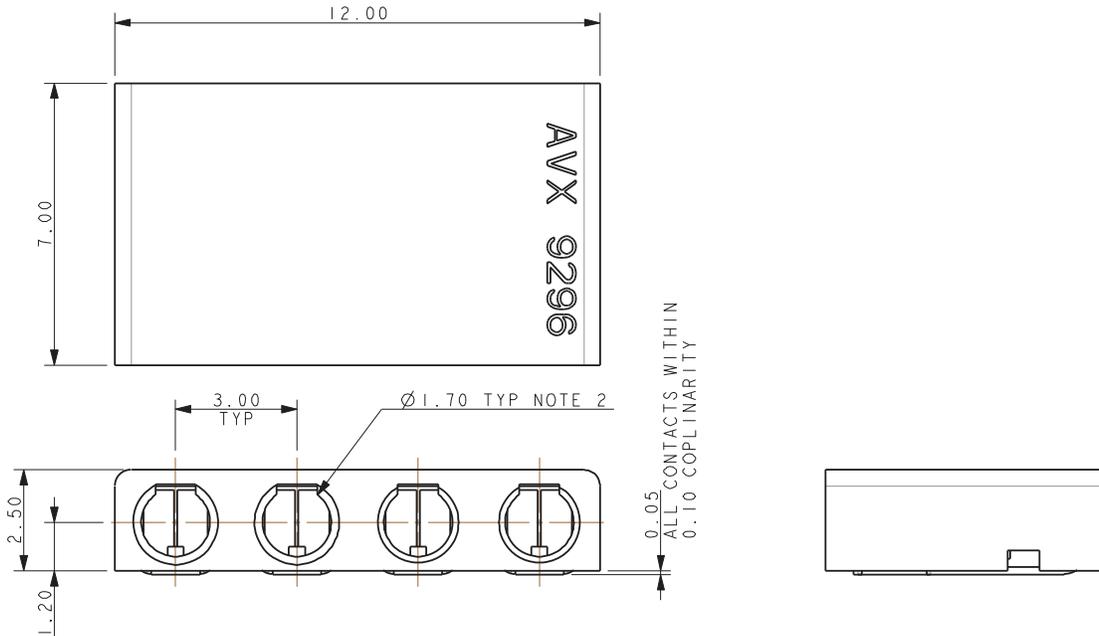
090721

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



4 Position

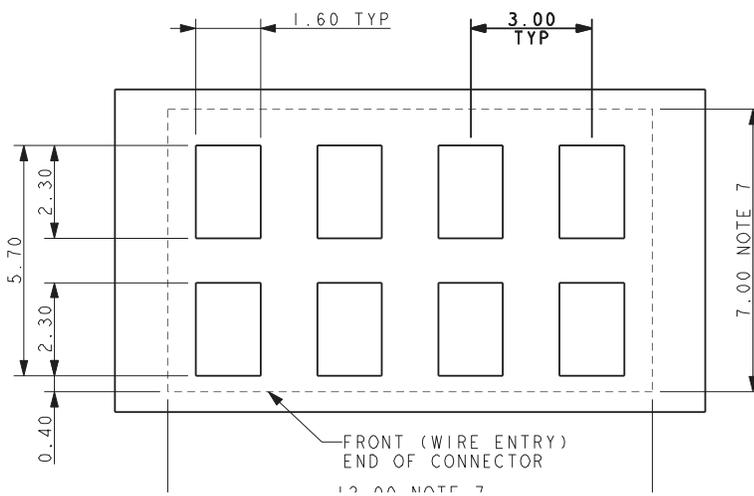
## 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 4 WAY



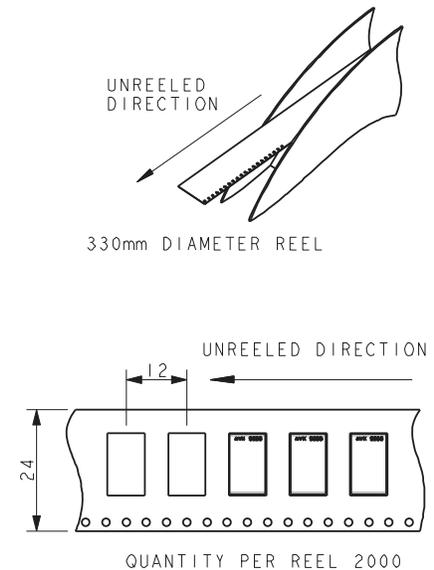
### NOTES:

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  $\pm 0.20$ .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

### SUGGESTED PCB LAYOUT



### PACKING DETAILS

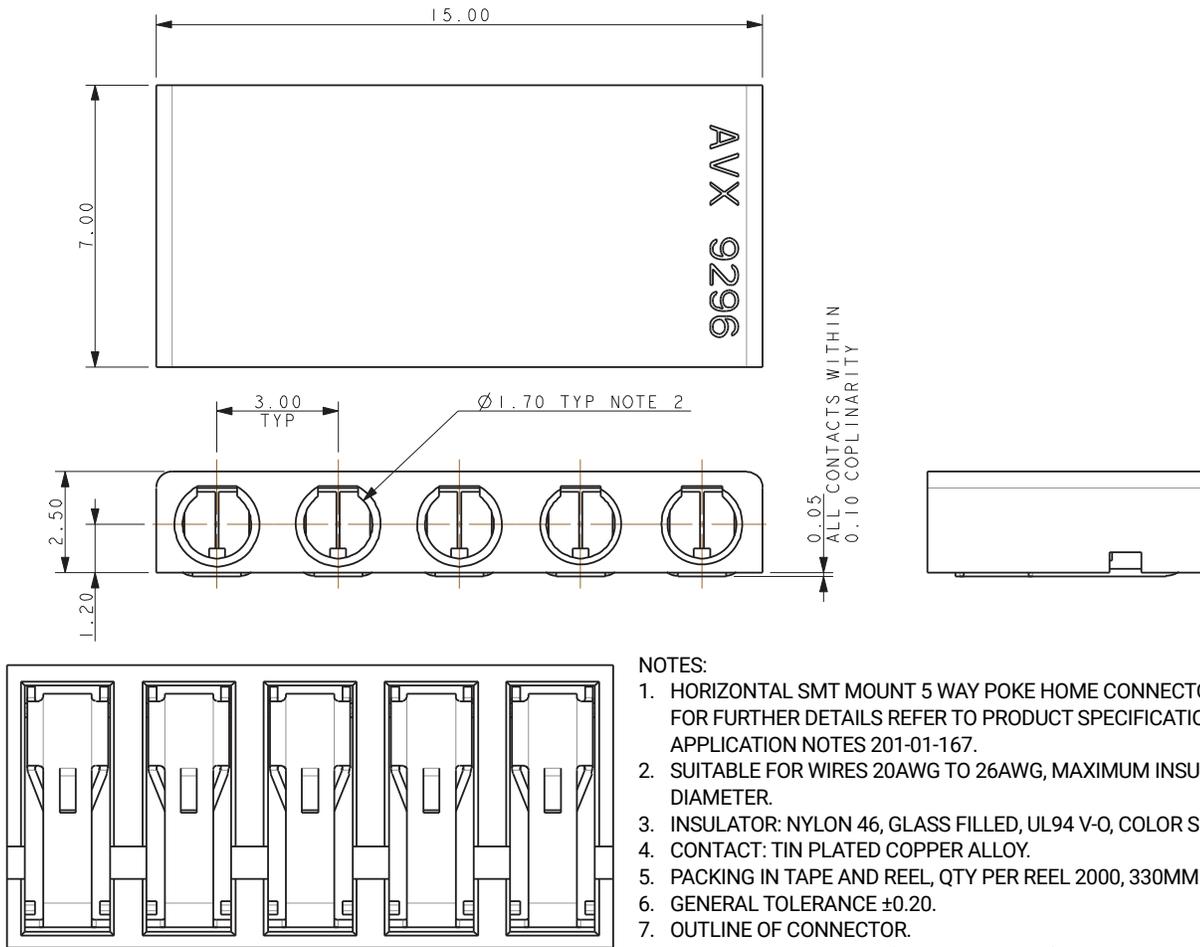


# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200

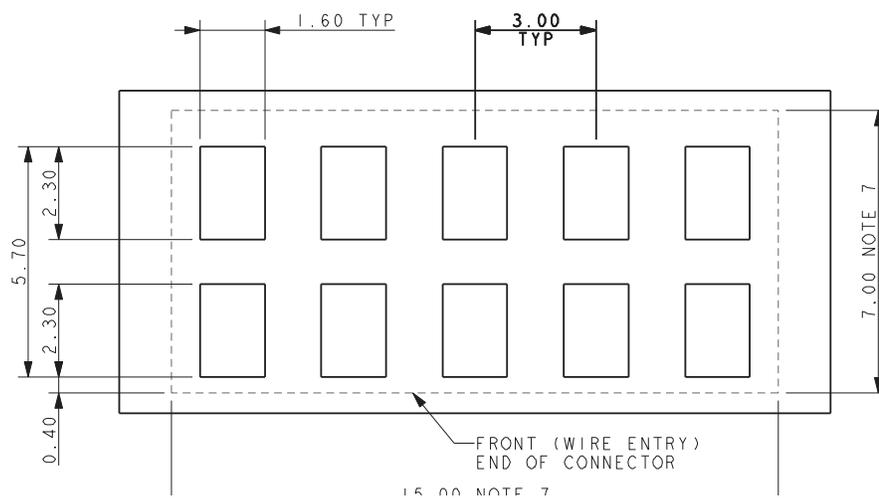


5 Position

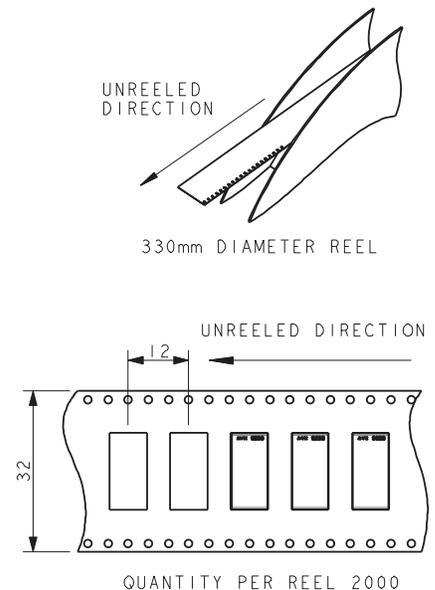
## 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 5 WAY



### SUGGESTED PCB LAYOUT



### PACKING DETAILS

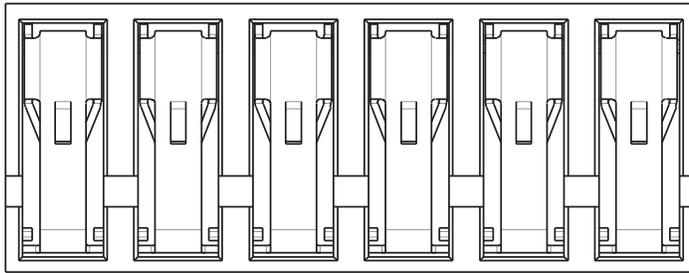
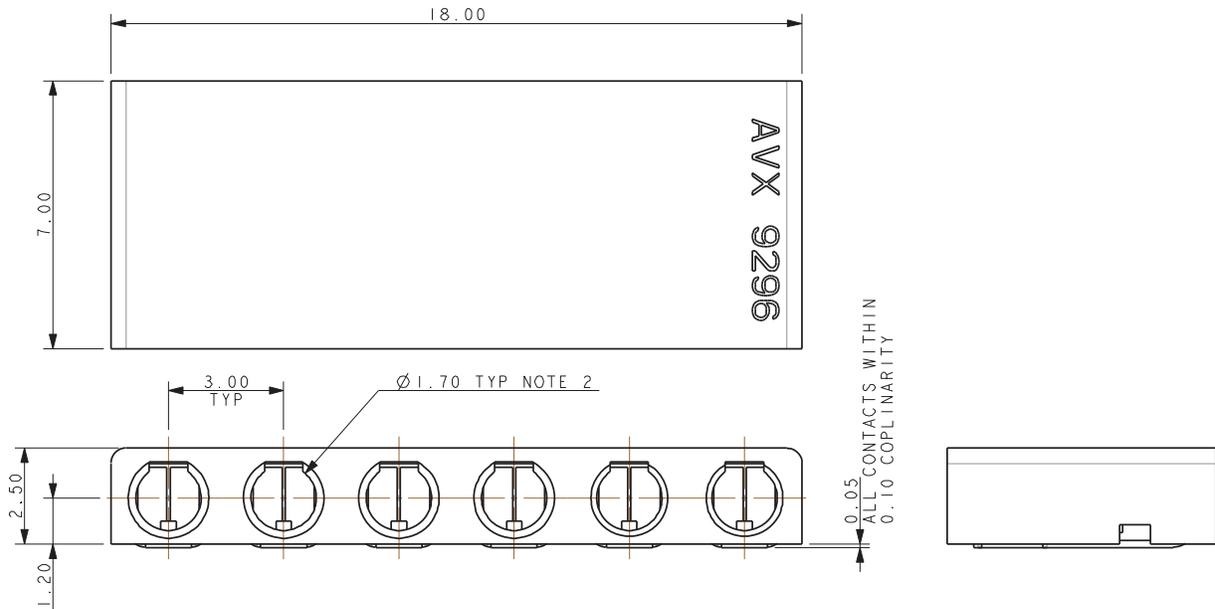


# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200



6 Position

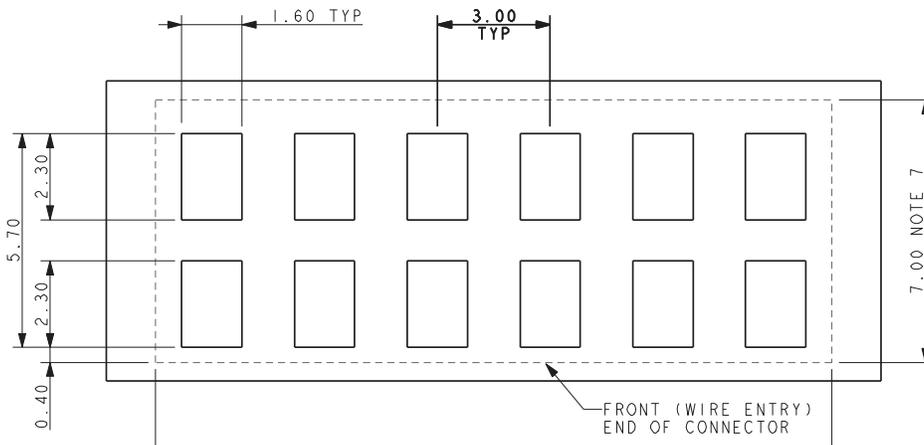
## 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – 6 WAY



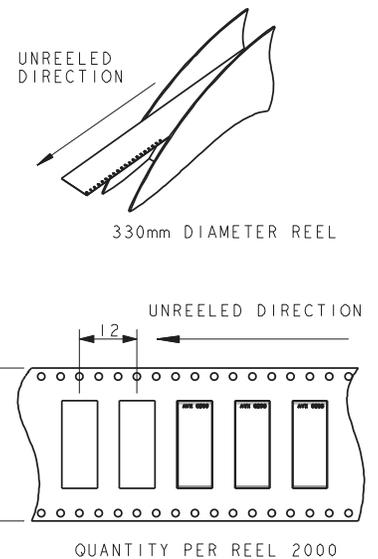
### NOTES:

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  $\pm 0.20$ .
7. OUTLINE OF CONNECTOR.
8. UL REFERENCE E90723 (US AND CANADA).

### SUGGESTED PCB LAYOUT



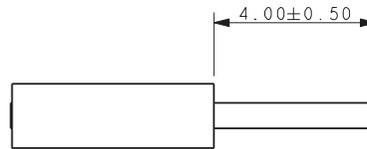
### PACKING DETAILS



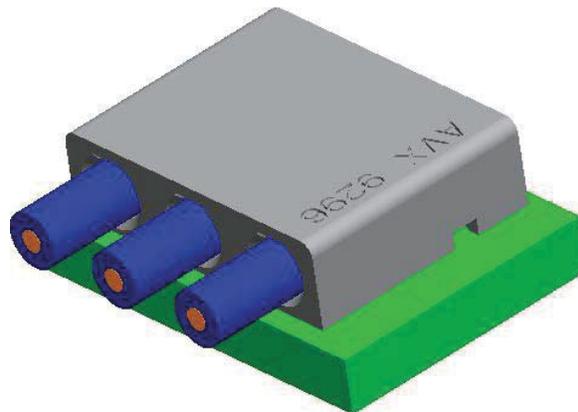
# POKE-HOME: LOW PROFILE HORIZONTAL 20-26 AWG: 9296-200

## Assembly

### 9296 HORIZONTAL MOUNT POKE HOME CONNECTOR – ASSEMBLY



WIRE STRIP LENGTH



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

