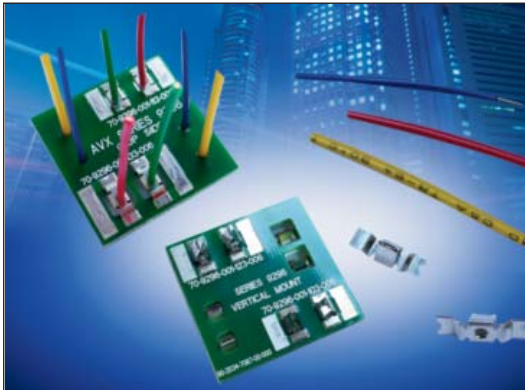


Poke-Home: Single Vertical Contact

18-26 AWG: WTB

70-9296



AVX continues to develop innovative connectors for the industrial electronics market that provide significant benefits over existing, outdated connector solutions. The latest release is single vertical Wire-to-Board (WTB) contacts that provide cost effective, yet robust discrete wire termination without the expense of an insulator and assembly costs. This new family of top and bottom entry contacts compliments the existing vertical poke home connectors already on the market, providing a lower cost solution without jeopardizing performance.

The new contacts support both solid and stranded wires ranging from 26AWG down to 18AWG and current ratings as high as 12 amps. The set of four contacts provide both top and bottom entry for FR4 and metal core printed circuit boards.

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

FEATURES AND BENEFITS

- Dual Beam contact provides maximum mechanical stability and wire retention
- Tape and reel packaged for automated SMT placement
- Staged current rating based on AWG, maximum is 12A (18AWG)
- Increased functionality with the single contact placement: multiple contacts and/or specific individual locations

ELECTRICAL

- Voltage Rating: 300V
Based on placement distance
- Current Rating: See matrix below

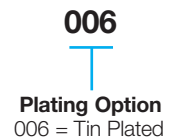
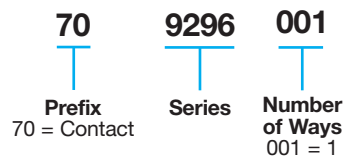
ENVIRONMENTAL

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

MECHANICAL

- Contact Material: Phosphor Bronze
- Contact Plating: Pure Tin
- Durability: 5 Cycles

HOW TO ORDER



| Code | Contact Location | Wire Insertion Direction | Recommended For Board Type | Accepted Wire Gauges |
|------|------------------|--------------------------|----------------------------|-------------------------------|
| 103 | Top Side | Bottom Entry | FR4 | 18 – 26 AWG Solid or Stranded |
| 113 | Through Board | Top Entry | FR4 | 18 – 26 AWG Solid or Stranded |
| 123 | Top Side | Bottom Entry | Metal Clad | 18 – 26 AWG Solid or Stranded |
| 133 | Through Board | Top Entry | Metal Clad | 18 – 26 AWG Solid or Stranded |



CURRENT RATING

| 18AWG | 20AWG | 22AWG | 24AWG | 26AWG |
|-------|-------|-------|-------|-------|
| 15A | 14A | 10A | 9A | 7A |

Certification: UL File #E90723

Poke-Home: Single Vertical Contact

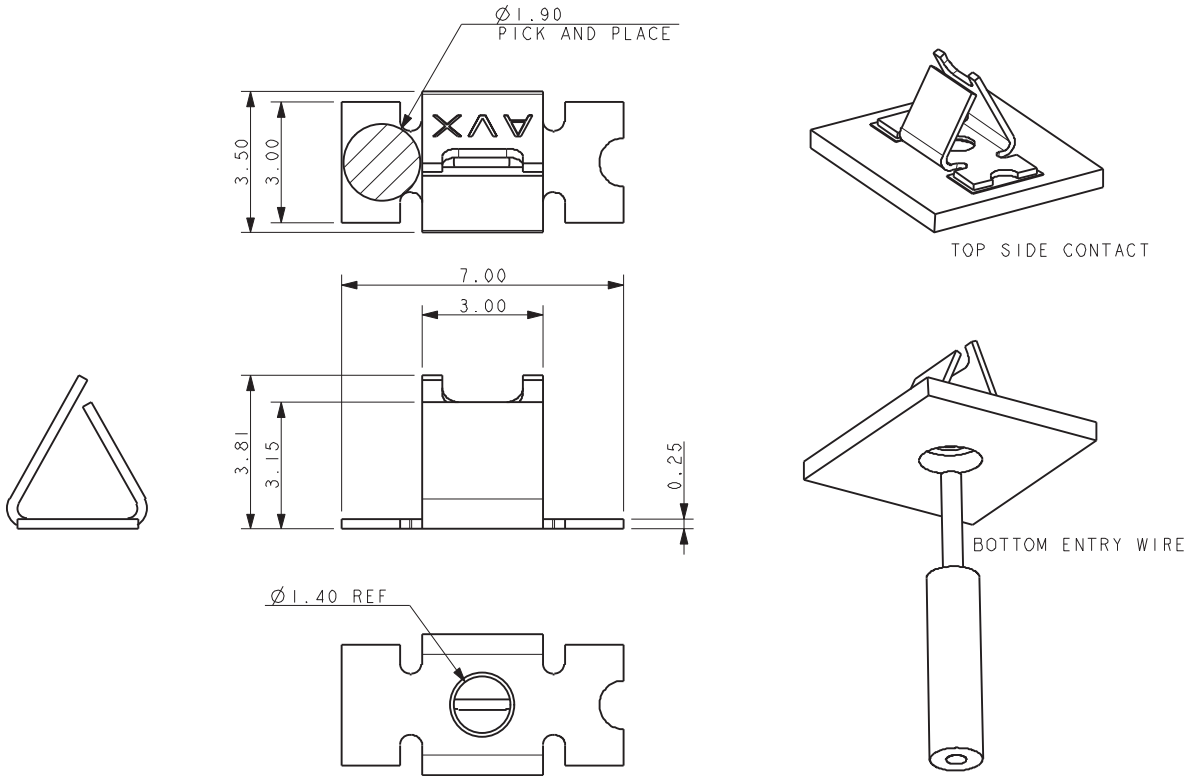
18-26 AWG: WTB

70-9296

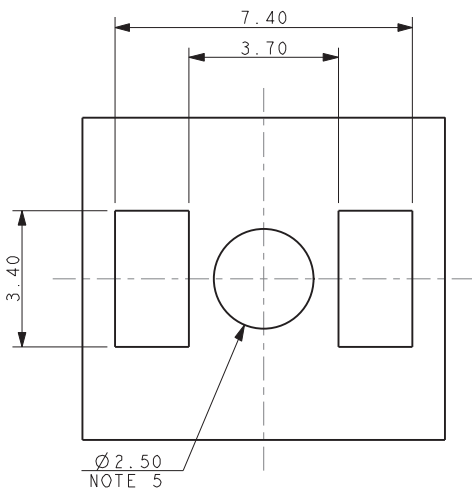
70-9296-001-103-006

9296 VERTICAL MOUNT SMT CONTACT

TOP SIDE CONTACT – BOTTOM ENTRY WIRE (FR4 BOARD)



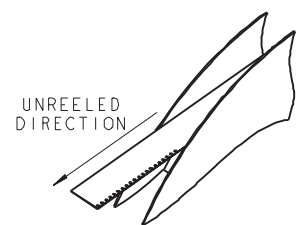
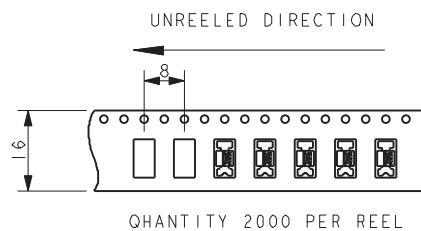
SUGGESTED PCB LAYOUT



NOTES:

- CONTACT MOUNTS ON TOP SIDE OF BOARD, WIRE INSERTED FROM UNDER-SIDE OF BOARD.
- STYLE RECOMMENDED FOR FR4 BOARDS WHERE MINIMUM CLEARANCE REQUIRED TO CONTACT AND MOUNTING PADS.
- FOR FURTHER INFORMATION REFER TO ELCO SPECIFICATION 201-01-143 AND APPLICATION NOTES 201-01-150.
- MATERIAL: TIN PLATED PHOSPHOR BRONZE.
- HOLE FOR WIRE INSERTION.
- PACING IN TAPE AND REEL, 2000 PIECES PER REEL.
- FOR WIRE TRIM DETAILS REFER TO PAGE 107.

PACKING DETAILS



330mm DIAMETER REEL

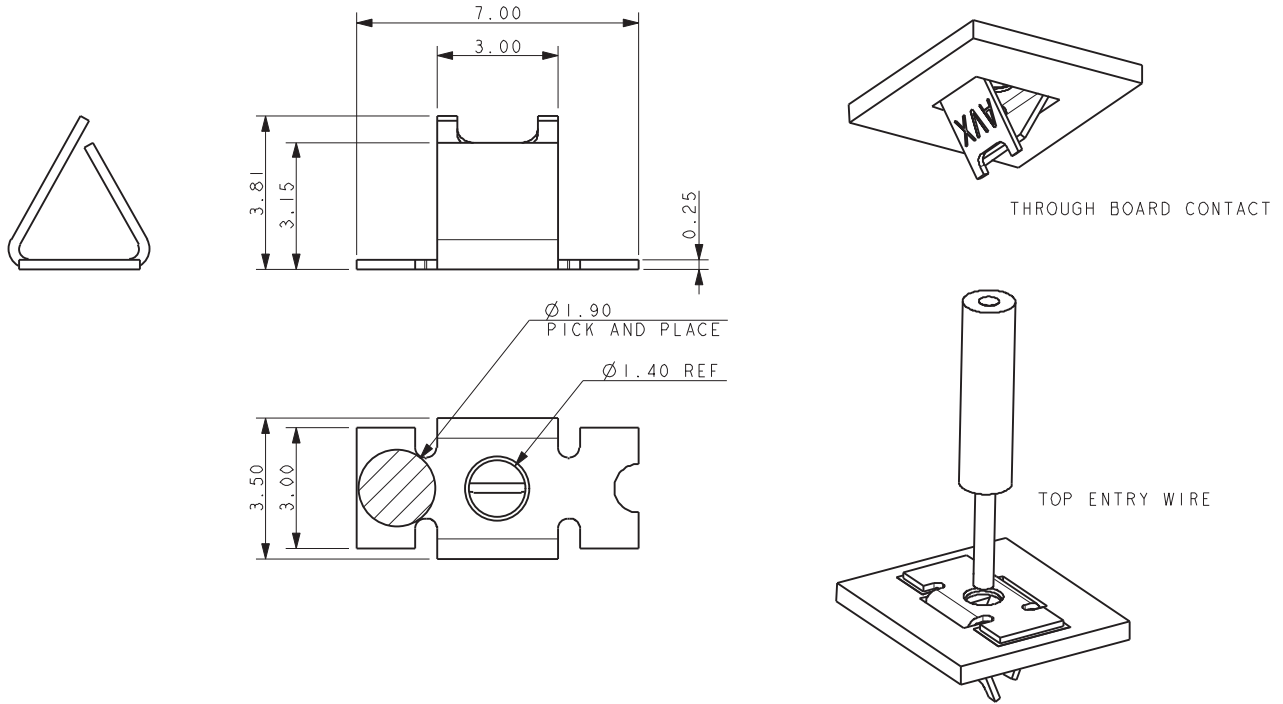
Poke-Home: Single Vertical Contact

18-26 AWG: WTB

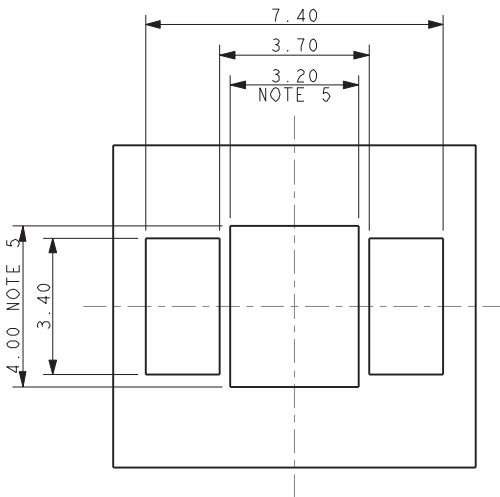
70-9296

70-9296-001-113-006

9296 VERTICAL MOUNT SMT CONTACT THROUGH BOARD CONTACT – TOP ENTRY WIRE (FR4 BOARD)



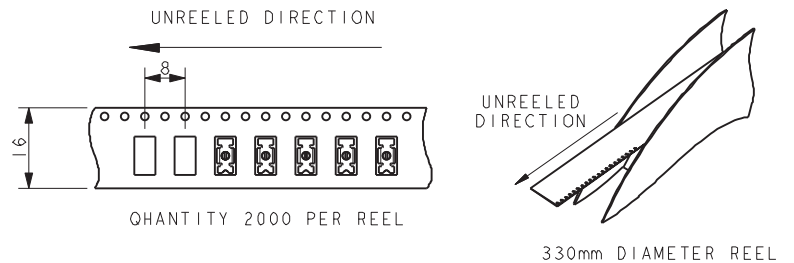
SUGGESTED PCB LAYOUT



NOTES:

1. CONTACT MOUNTS THROUGH THE BOARD, WIRE INSERTED FROM TOP SIDE OF BOARD.
2. STYLE RECOMMENDED FOR FR4 BOARDS WHERE MINIMUM CLEARANCE REQUIRED TO CONTACT AND MOUNTING PADS.
3. FOR FURTHER INFORMATION REFER TO ELCO SPECIFICATION 201-01-143 AND APPLICATION NOTES 201-01-150.
4. MATERIAL: TIN PLATED PHOSPHOR BRONZE.
5. HOLE DIMENSIONS FOR CONTACT.
6. PACING IN TAPE AND REEL, 2000 PIECES PER REEL.
7. FOR WIRE TRIM DETAILS REFER TO PAGE 107.

PACKING DETAILS



Poke-Home: Single Vertical Contact

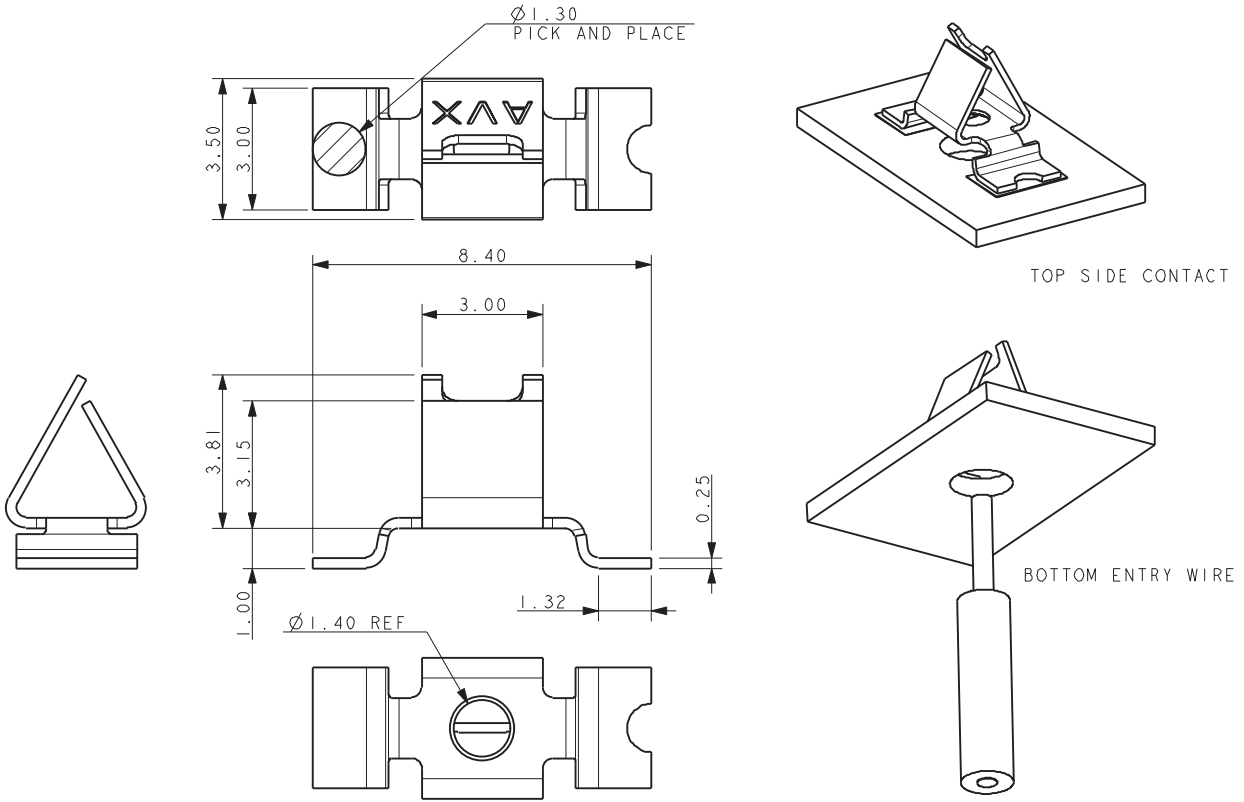
18-26 AWG: WTB

70-9296

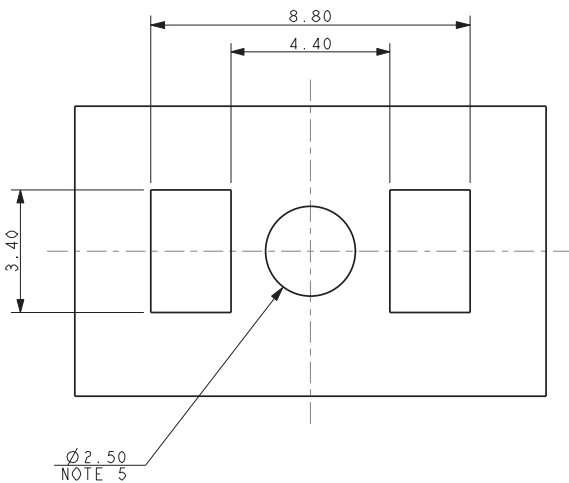
70-9296-001-123-006

9296 VERTICAL MOUNT SMT CONTACT

TOP SIDE CONTACT – BOTTOM ENTRY WIRE (METAL BOARD)



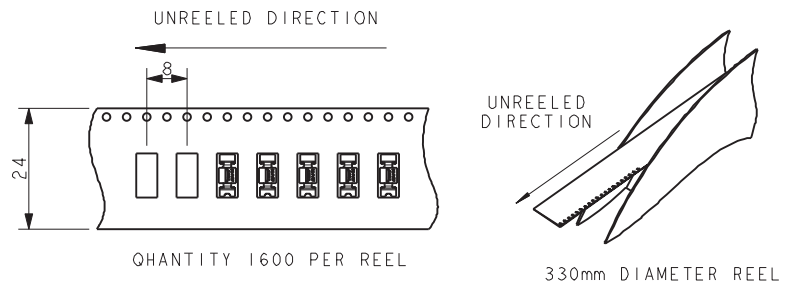
SUGGESTED PCB LAYOUT



NOTES:

- CONTACT MOUNTS ON TOP SIDE OF BOARD, WIRE INSERTED FROM UNDERSIDE OF BOARD.
- STYLE RECOMMENDED FOR METAL CLAD BOARDS WHERE MAXIMUM CLEARANCE REQUIRED TO CONTACT AND MOUNTING PADS.
- FOR FURTHER INFORMATION REFER TO ELCO SPECIFICATION 201-01-143 AND APPLICATION NOTES 201-01-150.
- MATERIAL: TIN PLATED PHOSPHOR BRONZE.
- HOLE FOR WIRE INSERTION.
- PACING IN TAPE AND REEL, 1600 PIECES PER REEL.
- FOR WIRE TRIM DETAILS REFER TO PAGE 107.

PACKING DETAILS



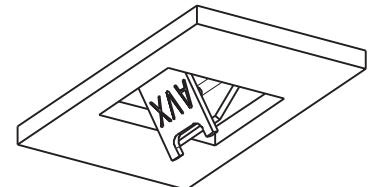
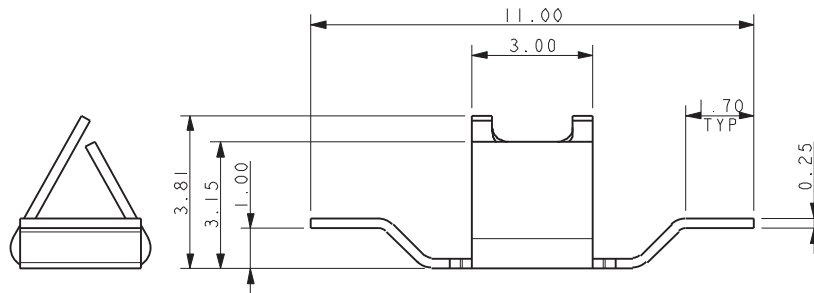
Poke-Home: Single Vertical Contact

18-26 AWG: WTB

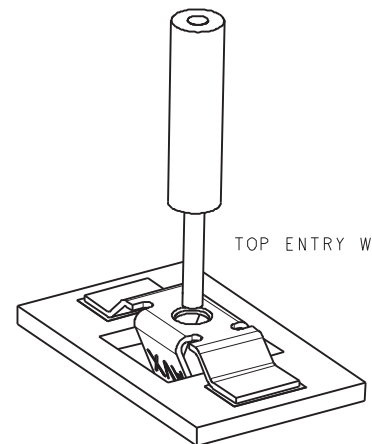
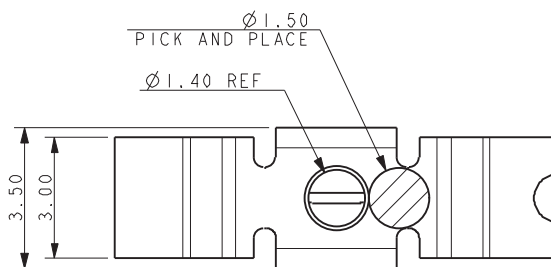
70-9296

70-9296-001-133-006

9296 VERTICAL MOUNT SMT CONTACT THROUGH BOARD CONTACT – TOP ENTRY WIRE (METAL BOARD)

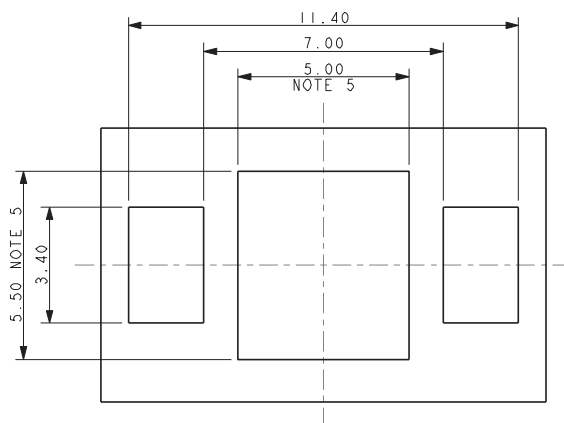


THROUGH BOARD CONTACT



TOP ENTRY WIRE

SUGGESTED PCB LAYOUT

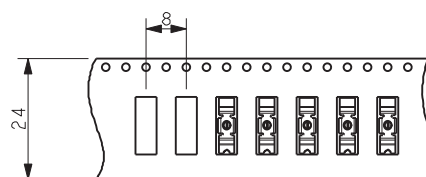


NOTES:

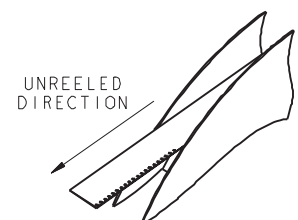
1. CONTACT MOUNTS THROUGH THE BOARD, WIRE INSERTED FROM TOP SIDE OF BOARD.
2. STYLE RECOMMENDED FOR METAL CLAD BOARDS WHERE ADDITIONAL CLEARANCE REQUIRED TO CONTACT AND MOUNTING PADS.
3. FOR FURTHER INFORMATION REFER TO ELCO SPECIFICATION 201-01-143 AND APPLICATION NOTES 201-01-150.
4. MATERIAL: TIN PLATED PHOSPHOR BRONZE.
5. HOLE DIMENSIONS FOR CONTACT.
6. PACING IN TAPE AND REEL, 2000 PIECES PER REEL.
7. FOR WIRE TRIM DETAILS REFER TO PAGE 107.

PACKING DETAILS

UNREEL DIRECTION



QUANTITY 2000 PER REEL



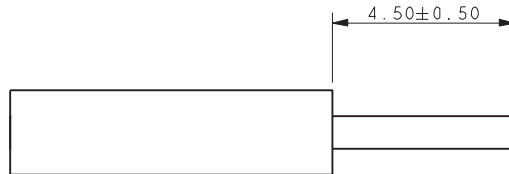
330mm DIAMETER REEL

Poke-Home: Single Vertical Contact

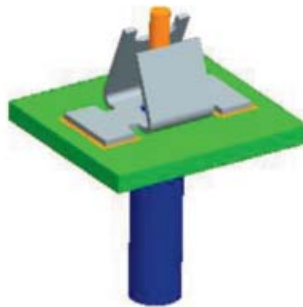
18-26 AWG: WTB

70-9296

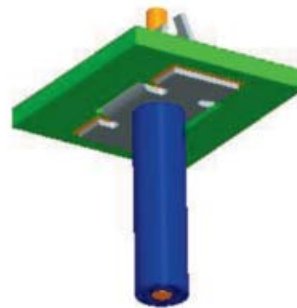
9296 VERTICAL MOUNT SMT CONTACT WIRE TRIM DETAILS



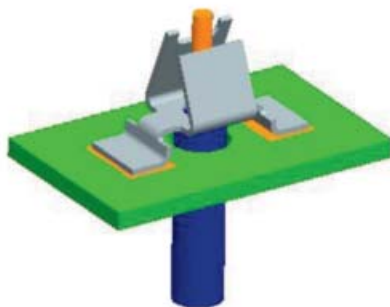
WIRE STRIP LENGTH, ALL STYLES



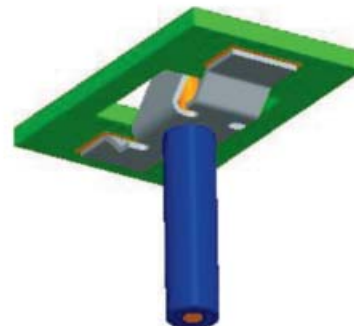
70-9296-001-103-006



70-9296-001-113-006



70-9296-001-123-006



70-9296-001-133-006

NOTES:

1. FOR FULL ASSEMBLY PROCEDURE REFER TO APPLICATION NOTES 201-01-150.
2. THE SAME WIRE STRIP LENGTH APPLIES TO ALL STYLES.
3. STRANDED WIRES SHOULD BE TWISTED TO PREVENT SINGLE STRANDS BECOMING DETACHED WHEN INSERTED INTO CONTACT.