

# SINGLE VERTICAL CONTACTS

## 18-26 AWG

# 201-01-175

### 1. SPECIFICATION DISTRIBUTION

No restrictions for issue

### 2. SCOPE

This specification contains the application notes for the 9296 poke home SMT mount contacts.

### 3. RELATED DOCUMENTS

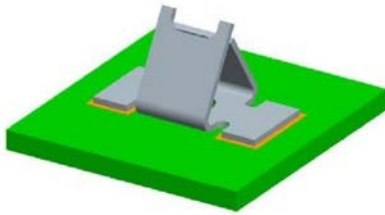
70-9296-001-1X3-006S – Sales Drawing, vertical

70-9296-001-1X2-006S – Sales Drawing, vertical

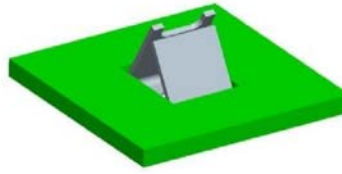
201-01-161 – Product Specification – vertical contacts.

Note: The colors used in this specification are for clarity only.

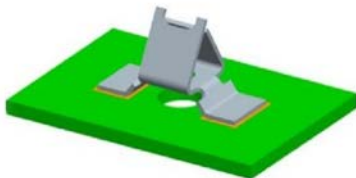
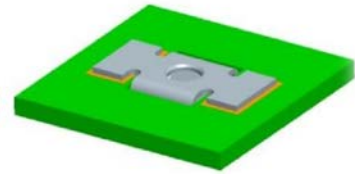
### 4. 9296 VERTICAL MOUNT CONTACTS 2mm and 3mm



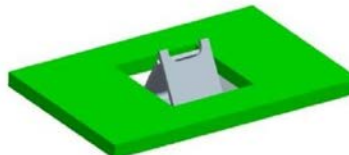
70-9296-001-102-006  
70-9296-001-103-006



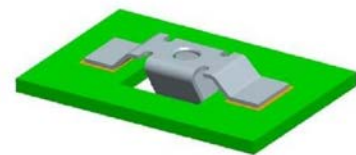
70-9296-001-112-006  
70-9296-001-113-006



70-9296-001-122-006  
70-9296-001-123-006



70-9296-001-132-006  
70-9296-001-133-006



#### 4.1. SUITABLE WIRES

70-9296-001-1X3-006 3mm contacts all solid (single conductor) wires from 18AWG to 26AWG and stranded wires 18AWG to 26AWG (see notes below). Maximum wire insulation diameter of 2.5mm.

70-9296-001-1X2-006 2mm contacts all solid (single conductor) wires from 22AWG to 26AWG and stranded wires 22AWG to 24AWG (see notes below). Maximum wire insulation diameter of 2.10mm.

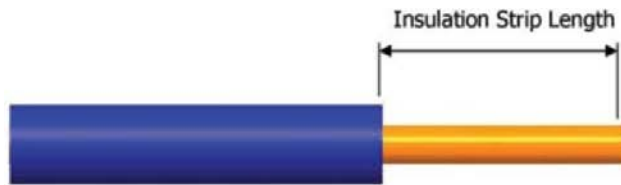
Stranded wires work best with a smaller number of strands (larger strand diameter). We recommend that ALL stranded wires after stripping are bunched and twisted to achieve better retention forces within the contact.

Stranded wires with a larger number of strands (thinner strands) can be used but it is important that all the strands are tightly twisted to gain maximum strength. It is possible to tin the ends but the conductor diameter must not exceed 1.1mm for the 70-9296-001-1X3-006 3mm contact series and 0.70mm for 70-9296-001-1X2-006 2mm contact series.

All wire types can be used in both plated and un-plated condition.

## 5. 9296 WIRE TERMINATION PROCEDURE (VERTICAL)

### 5.1. WIRE STRIPPING



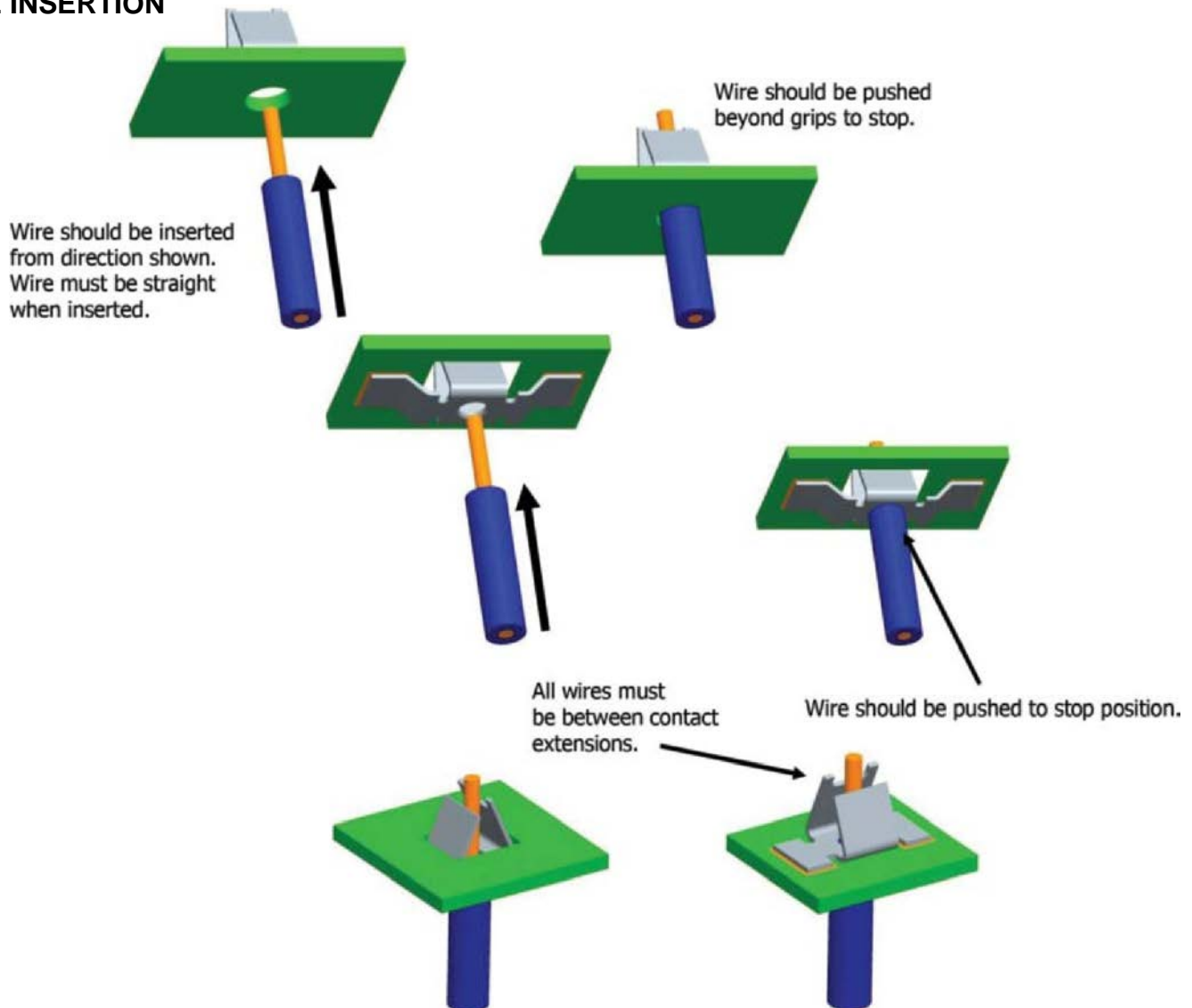
70-9296-001-1X2-006 2mm contact  
 Wire insulation strip length for 26/24/22AWG wires is recommended to be 3mm to 4mm.  
 (Note: for 26AWG stranded wires it may be necessary to tin the stripped wire for added strength.)

70-9296-001-1X3-006 3mm contact.  
 Wire insulation strip length for 26/24/22/20/18AWG wires is recommended to be 4mm to 5mm.

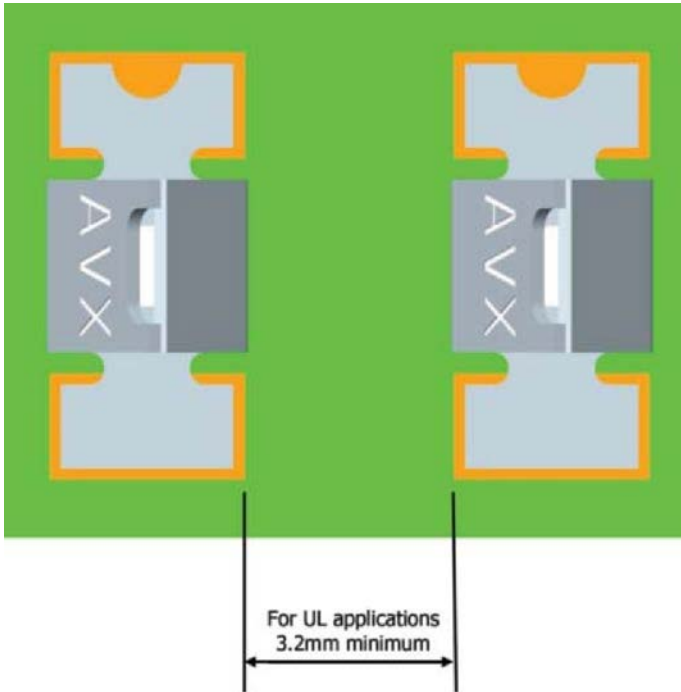


Stranded wire should be tightly bunched and twisted before insertion. Trimmed wire must be kept straight for correct insertion.

### 5.2. WIRE INSERTION



## 6. UL REQUIREMENTS FOR PAD SPACING



UL approval based on 3.2mm gap between pads.

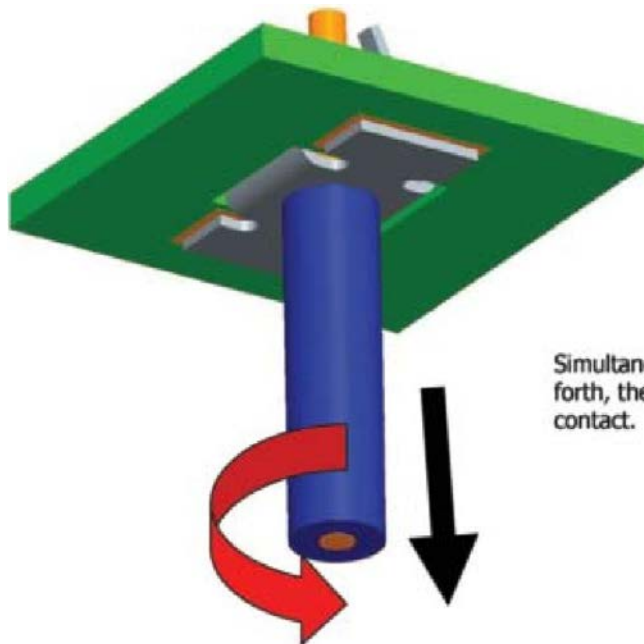
Minimum contact center spacing 9176-1X2 2mm contacts 5.6mm.

Minimum contact center spacing 9176-1X3 3mm contacts 6.6mm.

For non UL applications the gap may be reduced at the customers discretion depending on the voltage applied.

## 7. WIRE EXTRACTION PROCESS

### 7.1. MANUAL WIRE REMOVAL



Simultaneously pull and twist wire back and forth, the wire will slowly screw out of the contact.