## **General Information**





## **GENERAL DESCRIPTION**

AVX's STRIPT<sup>™</sup>, insulation displacement naked contact technology provides cost effective, insulator-less, wire-to-board connection for discrete wire applications. Designed from the ground up to function just like a traditional insulated connector these UL certified contacts have been inductry proven for many years. This 9177-500 series have been

insulated connector, these UL certified contacts have been industry proven for many years. This 9177-500 series has been designed to support the larger wire gauges from a robustness and current rating perspective.

### **APPLICATIONS**

- · Industrial motor controls, drives & pumps
- · Commercial building wiring and electrical systems
- Outdoor/Transportation lighting
- · Solar and alternative energy

#### **ELECTRICAL**

- Current Rating: 15
- Voltage Rating: 600 VAC

#### **ENVIRONMENTAL**

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

### **HOW TO ORDER**

<u>70</u>	9177	001	<u>5XX</u>	006
Prefix	Series	<b>No. of Ways</b> 001 = 1	Description 591 = 12AWG Stranded and Solid 501 = 14AWG Stranded and Solid 512 = 16AWG Stranded and Solid 522 = 18AWG Stranded and Solid	Plating 006 = Pure Tin all over

Certification: UL File #E90723

### **FEATURES AND BENEFITS**

- · Proven "gas tight" cold welded wire termination
- Redundant contact systems provides enhanced wire retention and high current carrying capabilities
- · Cost effective STRIPT<sup>™</sup> insulator-less contact system

#### **MECHANICAL**

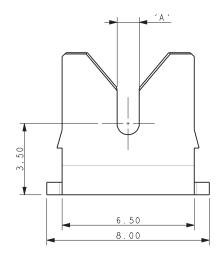
- Contact Material: Phosphor Bronze
- Contact Plating: Pure tin over nickel
- · Durability: 3 termination cycles

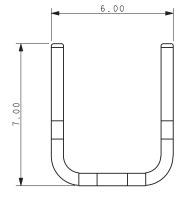


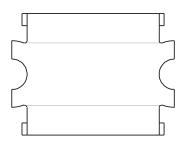
# **Contact Detail**



## **CONTACT DETAIL**



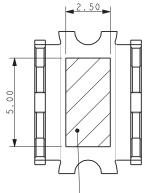




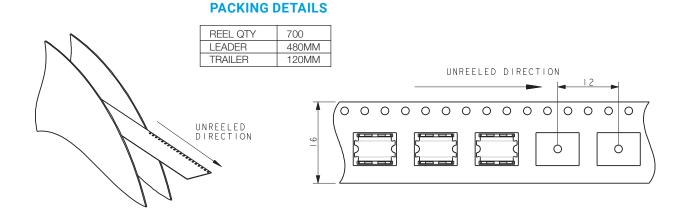
Code	Accepted Wire Gauge	Α
591	12AWG Stranded and Solid	1.50
501	14AWG Stranded and Solid	1.10
512	16AWG Stranded and Solid	0.82
522	18AWG Stranded and Solid	0.72

#### NOTES:

- 1. CONNECTOR FO IDC WIRE TO BOARD CONNECTION.
- 2. CONTACT MATERIAL: PHOSPHORE BRONZE.
- 3. CONTACT PLATING: PURE TIN.
- CONTACTS DESIGNED TO ACCEPT BETWEEN 12 AND 18 GAUGE STANDED WIRE, SEE TABLE.
- 5. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
- 6. FOR FULL PRODUCT SPECIFICATIONS REFER TO AVX SPECIFICATION 201-01-208 AND APPLICATION NOTES 201-01-209.
- 7. SMT PCB LAYOUT, REFER TO PAGE 3.
- 8. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
- 9. ASSEMBLY TOOLING ON PAGE 4.
- 10. UL REFERENCE E90723 (US AND CANADA).



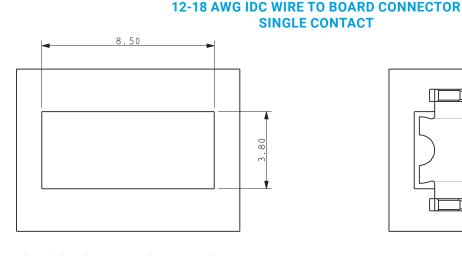
-PICK AND PLACE AREA



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



## **IDC Wire to Board Connector Single Contact**



SUGGESTED PCB LAYOUT

## **ORIENTATION OF CONTENT ON PAD**

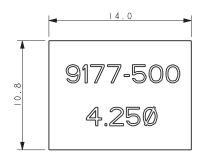
NOTES:

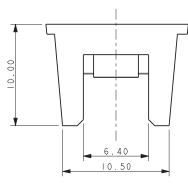
- 1. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-208 AND 201-01-209
- 2. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
- 3. ASSEMBLY TOOLING ON PAGE 4.

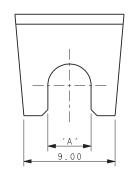
# **Assembly Tooling**



### **ASSEMBLY TOOLING**







Wire Guage	Max Insulation (Dimensions 'A')	Tool Number Metal Tool for High Volume	Tool Numbere Plastic Tool for Small to Medium Volume
12-18 AWG	ø 4.25	06-9177-7020-01-001	06-9177-7022-01-001
12-18 AWG	ø 3.50	06-9177-7020-02-001	06-9177-7022-02-001
12-18 AWG	ø 2.75	06-9177-7020-03-001	06-9177-7022-03-001

NOTES:

1. ASSEMBLY TOOLING FOR CONTACTS 70-9177-001-5XX-006 ONLY.

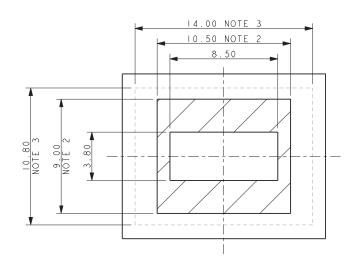
2. MINIMUM AREA OF PCB TO BE KEPT CLEAR OF COMPONENTS. TRACKS PERMISSIBLE.

3. MAXIMUM COMPONENT HEIGHT 9.0MM IN THIS AREA.

4. REFER TO TABLE FOR CORRECT TOOL/WIRE COMBINATION.

5. REFER TO APPLICATION NOTE 201-01-209 FOR FURTHER INFORMATION.

6. DIMENSIONS FOR TOOL ARE REFERENCE DIMENSIONS.



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