

SINGLE IDC CONTACT 12-18 AWG: 9177-500



General Information



GENERAL DESCRIPTION

KYOCERA AVX's STRIPT™, 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 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. The optional cap provides a positive strain relief even in the harshest conditions and acts as the termination tool for severe vibration applications.

APPLICATIONS

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

ELECTRICAL

- Current Rating: 15 Amps/Contact
- Voltage Rating: 600 VAC

ENVIRONMENTAL

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

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™ insulator-less contact system
- Optional termination cap provides additional strain relief for severe environments

MECHANICAL

- Cap Insulator Material: High Temperature Nylon: UL94V-0
- Contact Material: Phosphor Bronze
- Contact Plating: Pure tin over nickel
- Durability: 3 termination cycles

HOW TO ORDER – CONTACT OPTIONS

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



Certification: UL File #E90723

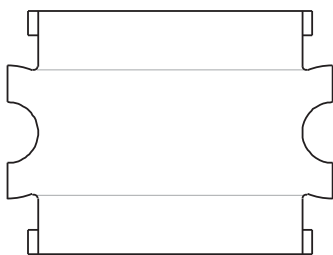
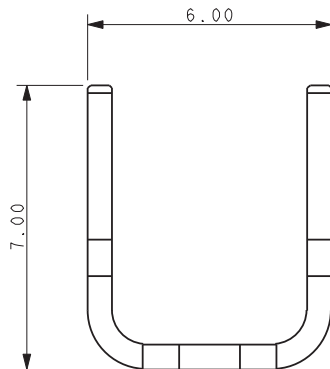
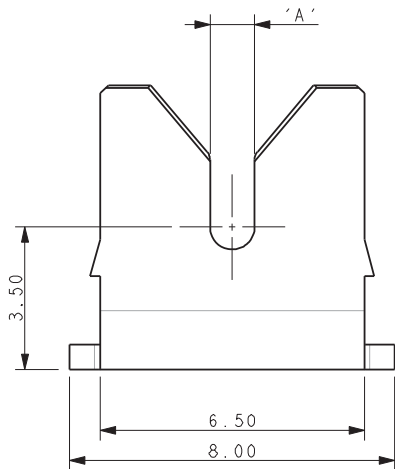
HOW TO ORDER – CAP OPTIONS - SEE PAGE 5

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Contact Detail

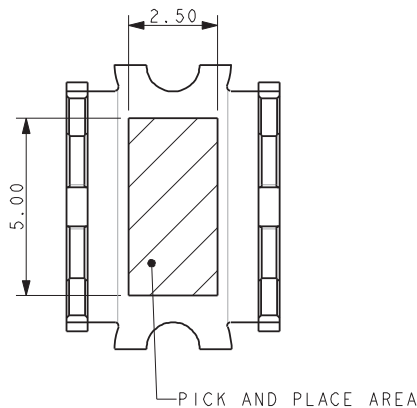


CONTACT DETAIL



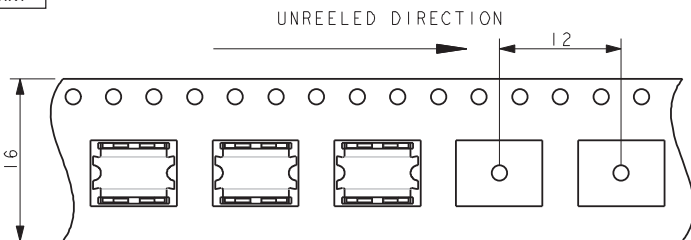
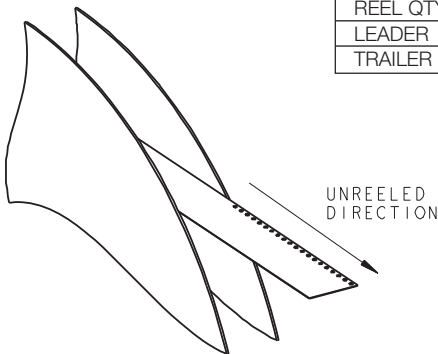
Code	Accepted Wire Gauge	A
591	12AWG Stranded and Solid	1.50
501	14AWG Stranded and Solid	1.10
512	16AWG Stranded and Solid	0.82
522	18AWG Stranded and Solid	0.72

- NOTES:
1. CONNECTOR FO IDC WIRE TO BOARD CONNECTION.
 2. CONTACT MATERIAL: PHOSPHORE BRONZE.
 3. CONTACT PLATING: PURE TIN.
 4. 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).



PACKING DETAILS

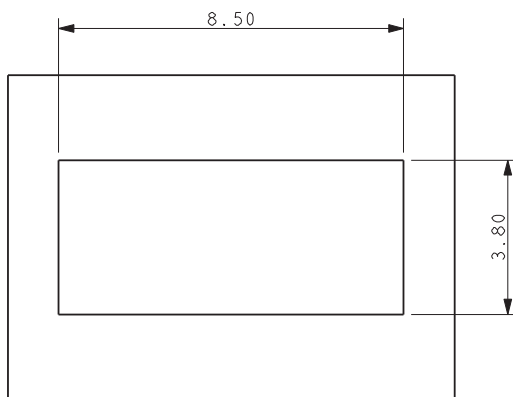
REEL QTY	700
LEADER	480MM
TRAILER	120MM



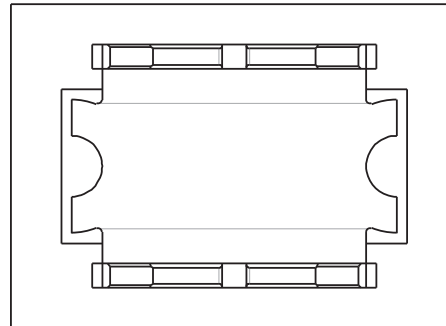
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IDC Wire to Board Connector Single Contact

12-18 AWG IDC WIRE TO BOARD CONNECTOR SINGLE CONTACT



SUGGESTED PCB LAYOUT



ORIENTATION OF CONTACT ON PAD

NOTES:

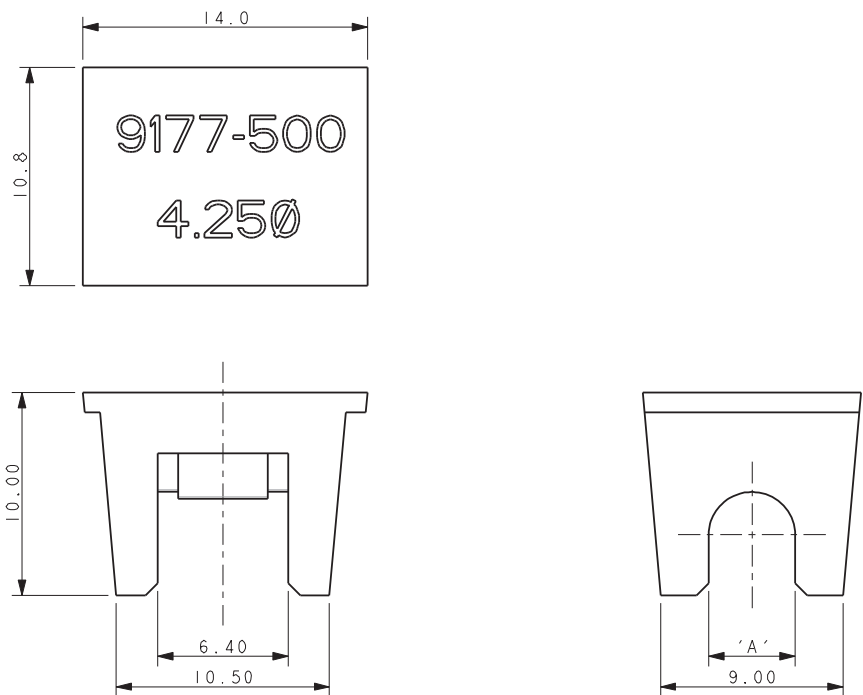
1. FOR FULL PRODUCT SPECIFICATION REFER TO AVX SPEC 201-01-208 AND 201-01-209
2. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
3. ASSEMBLY TOOLING ON PAGE 4.

SINGLE IDC CONTACT 12-18 AWG: 9177-500

Assembly Tooling

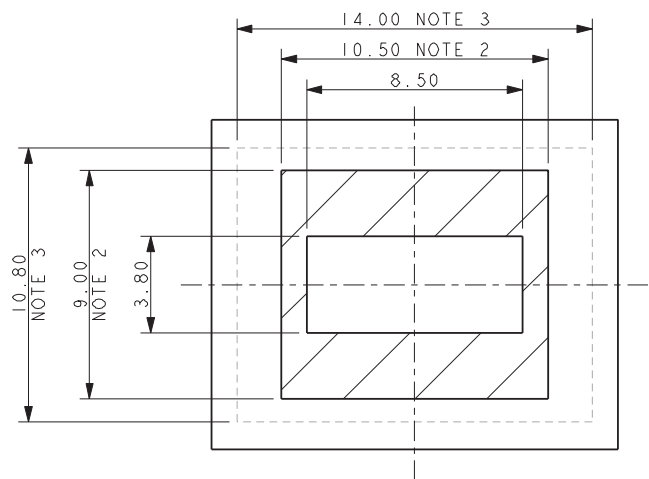


ASSEMBLY TOOLING



Wire Gauge	Max Insulation (Dimensions 'A')	Tool Number Metal Tool for High Volume	Tool Number 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

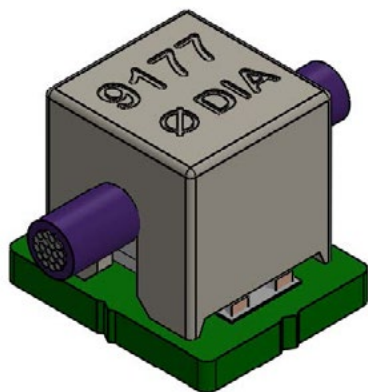
- NOTES:
- 1. ASSEMBLY TOOLING FOR CONTACTS 70-9177-001-5XX-006 ONLY.
 - 2. MINIMUM AREA OF PCB TO BE KEPT CLEAR OF COMPONENTS. TRACKS PERMISSIBLE.
 - 3. MAXIMUM COMPONENT HEIGHT 9.0MM IN THIS AREA.
 - 4. REFER TO TABLE FOR CORRECT TOOL/WIRE COMBINATION.
 - 5. REFER TO APPLICATION NOTE 201-01-209 FOR FURTHER INFORMATION.
 - 6. DIMENSIONS FOR TOOL ARE REFERENCE DIMENSIONS.



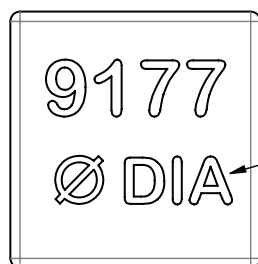
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Cap Details

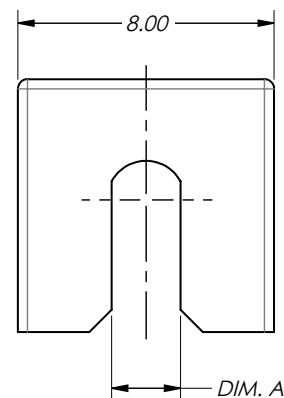
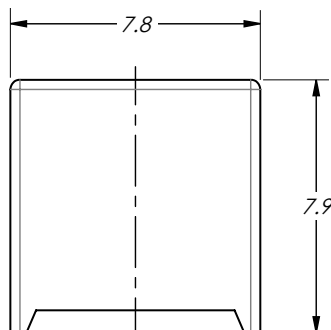
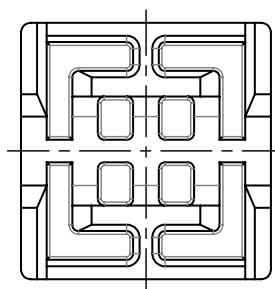
CAP DETAILS



PART NUMBER	DIM. A	TEXT	WIRE	COLOR
60-9177-001-531-100	2.75	ø 3.1	12 AWG	WHITE (STANDARD)
60-9177-001-531-000				BLACK (SPECIAL ORDER)
60-9177-001-526-100	2.25	ø 2.6	14 AWG	WHITE (STANDARD)
60-9177-001-526-000				BLACK (SPECIAL ORDER)
60-9177-001-522-100	1.90	ø 2.2	16 AWG	WHITE (STANDARD)
60-9177-001-522-000				BLACK (SPECIAL ORDER)
60-9177-001-519-100	1.65	ø 1.9	18 SWG	WHITE (STANDARD)
60-9177-001-519-000				BLACK (SPECIAL ORDER)



TEXT. SEE P.N. TABLE



NOTES:

1. CAP FOR TERMINATING WIRES TO 9177-500 SERIES CONTACTS.
2. MATERIAL: HIGH TEMPERATURE NYLON; UL94V-0.
3. FOR FULL PRODUCT SPECIFICATION, REFER TO KAVX PRODUCT SPEC 201-01-208 AND APPLICATION NOTES 201-01-124.
4. PACKAGING TO BE BULK WITH 700 PARTS PER BAG.
5. FOR INSTALLATION DETAILS, SEE DRAWING 70-9177-001-5XX-006S.
6. PCB MUST BE CLEAR OF COMPONENTS ALLOWING CAP TO SEAT.