SSL - Discrete Wire IDC

Series 9175



The 917X series of surface mount Insulation Displacement Connectors (IDC) were developed to meet the harsh automotive and industrial market applications for connecting individual wires directly to a PCB ranging from 14 AWG to 28 AWG. This industry proven contact system has been tested to automotive levels of shock, vibration, and temperature cycling to prove their reliability and robustness. The simplicity of inserting a wire into the connector with a small tool allows a wide range of devices to be connected to the PCB without soldering. In SSL applications specifically, these connectors are used to bring power and signal onto the PCB or are used to daisy chain multiple boards together in a long string. While the IDC contact provides a gas-tight connection to conductor of the wire, the housing has been designed to grab the insulation of the wire to provide a positive strain relief even in the harshest conditions. In case of repair, the wires can be removed and replace up to three times.

The 9175 series accepts 26 AWG to 28 AWG wires with an insulation diameter ranging from 0.7mm to 1.0mm. These single contact connectors support a 1 amp current rating and have a split SMT tail design to provide maximum stability on the PCB. Available in a 2p and 3p configuration, these connectors can be end stackable for higher pin counts.

APPLICATIONS

- Connecting discrete wire components directly to the PCB
- Bringing power and signals onto a PCB
- Daisy chaining PCB's together to create a continuous string of boards
- Application Notes: refer to 201-01-124

FEATURES AND BENEFITS

- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Connector housing captures the wire insulation for positive strain relief
- Tested to automotive levels on shock, vibration and temperature cycling for reliability
- Low and high volume assembly tools to match production volumes
- Reduced total applied cost versus solder or crimp processes
- High temperature insulator capable to 260 degrees C reflow soldering processes

ELECTRICAL

- Current Rating: 1 Amp / Contact
- Voltage Rating: 125 VAC

ENVIRONMENTAL

- Operating Temperature: -40ºC to +125ºC

MECHANICAL

- Insulator Material: Nylon 46: UL94V0
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel
- Durability: 3 Cycles

HOW TO ORDER

00 — **Prefix**

9175 — **Series**

00X — **Number of Ways**

Code	No of Ways	Details
002	2	Page 39
003	3	Page 40

001 — **Wire Gauge Size**

Code	Accepted Wire Gauge	Wire Insulation
001	28 Gauge Solid or Stranded 26 Gauge Solid or Stranded	Min Ø 0.70 Max Ø 1.00

X — **Insulator Color**

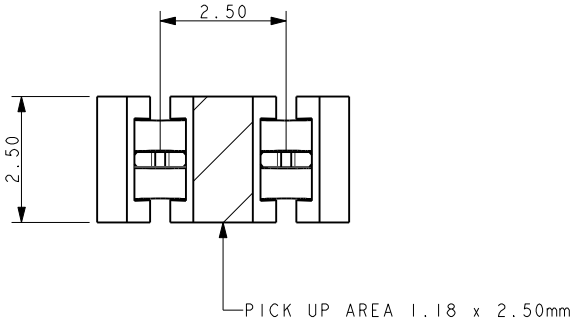
Code	Color	Application
0	Black	Industrial
1	White	Lighting

06 — **Plating Option**

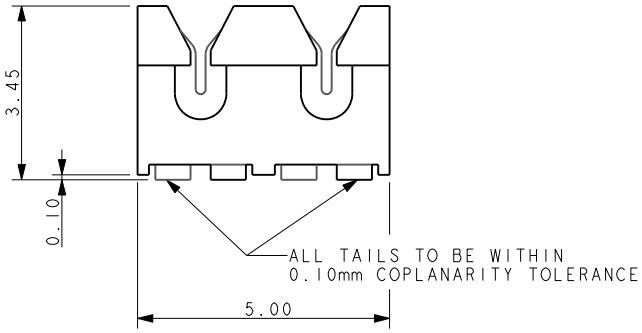
06 = Pure Tin all over

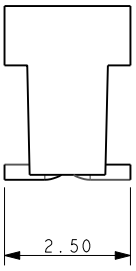
Certification: UL File #E320991

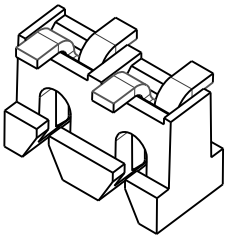
26-28 AWG 2 WAY IDC CONNECTOR

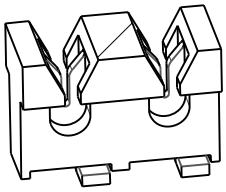


NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHORE BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
   COLOR REFER TO PAGE 38.
3. CONNECTOR DESIGNED TO ACCEPT 26 AND 28 GAUGE SOLID OR STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-100.



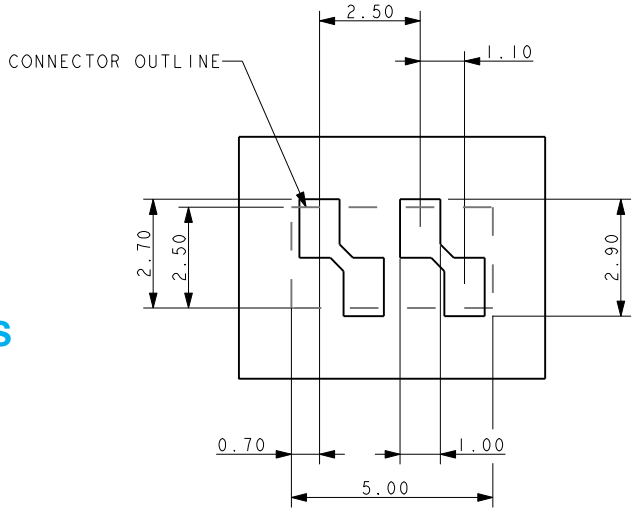






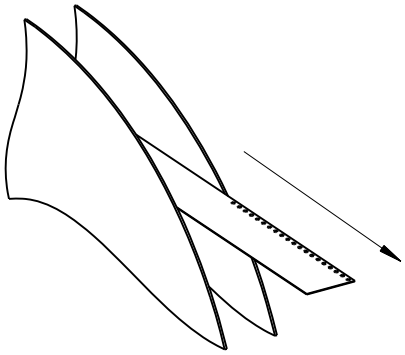
SMT PCB LAYOUT

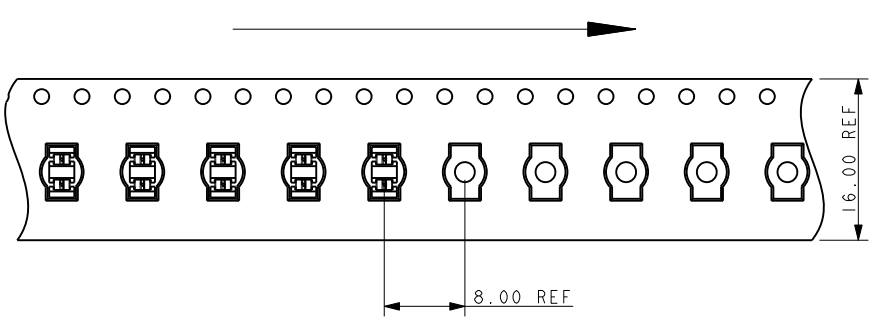
PURE TIN PADS



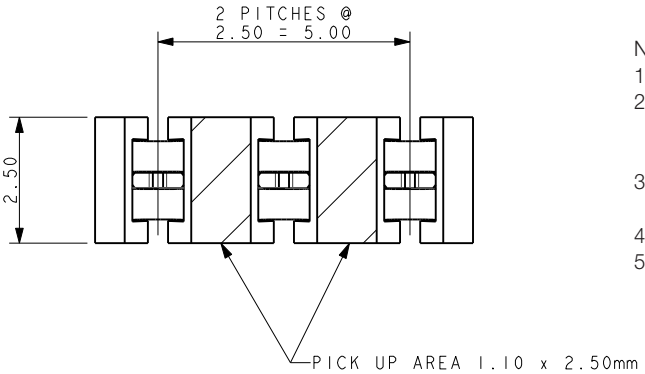
PACKING DETAILS

REEL QTY	2000
LEADER	500MM
TRAILER	500MM
REEL / BOX	7
PACK QTY	14000

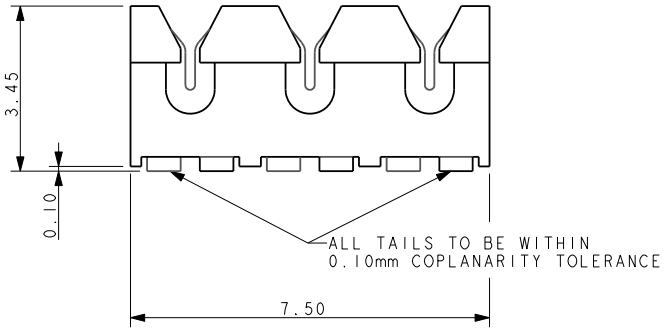


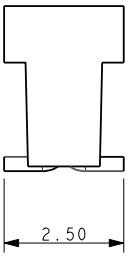


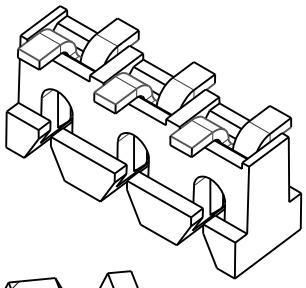
26-28 AWG 3 WAY IDC CONNECTOR

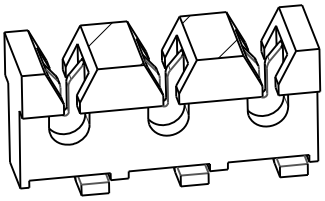


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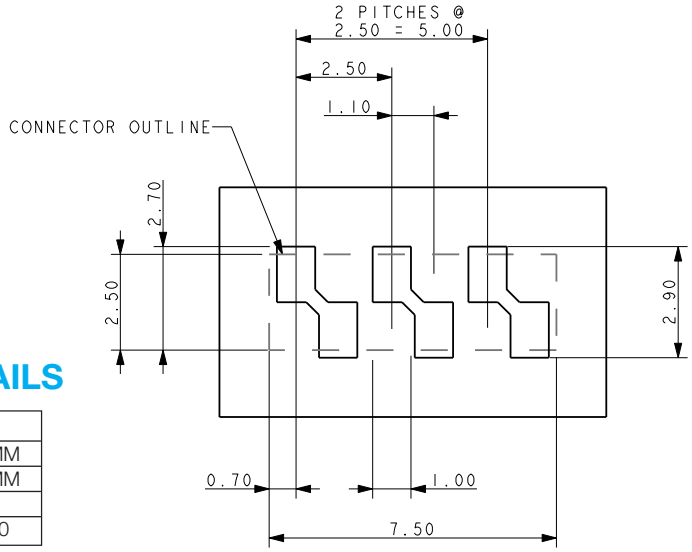






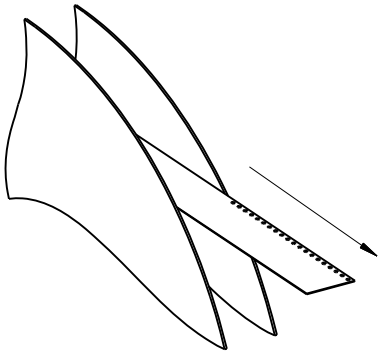
SMT PCB LAYOUT

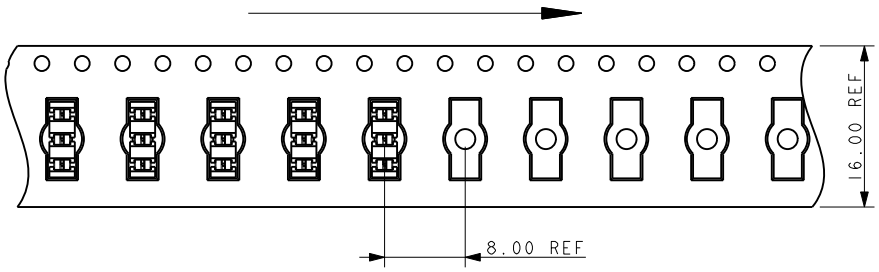
PURE TIN PADS



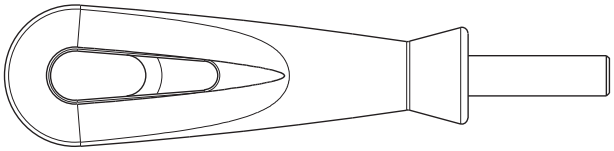
PACKING DETAILS

REEL QTY	2000
LEADER	500MM
TRAILER	500MM
REEL / BOX	7
PACK QTY	14000



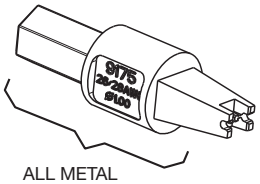


HAND INSERTION TOOLING
SINGLE WIRE INSERTION TOOL FOR 26/28 GAUGE WIRE



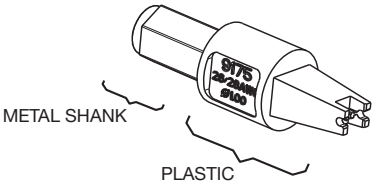
UNIVERSAL HANDLE

Details	Tool Part Number
6.35 A/F HEX BIT HOLDER	06 7000 7730 01 000



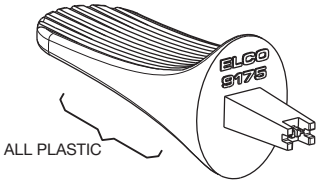
HIGH PRODUCTION
Metal

Max Insulation Dia	Tool Part Number
∅ 1.00	06 9175 7017 01 000



MED PRODUCTION
Metal/Plastic

Max Insulation Dia	Tool Part Number
∅ 1.00	06 9175 7016 01 000

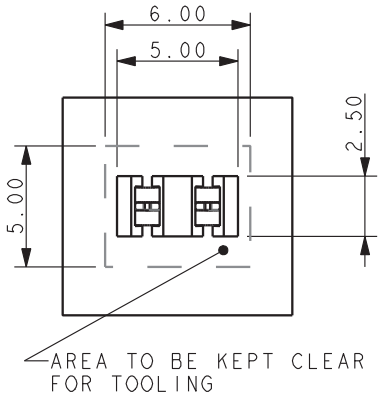


LOW PRODUCTION
Plastic

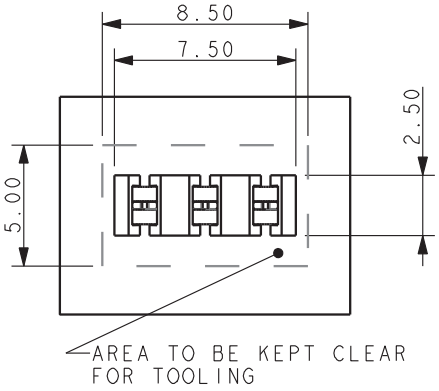
Max Insulation Dia	Tool Part Number
∅ 1.00	06 9175 7004 01 000

CLEARANCE AREA ON PCB FOR HAND TOOLING

2 WAY



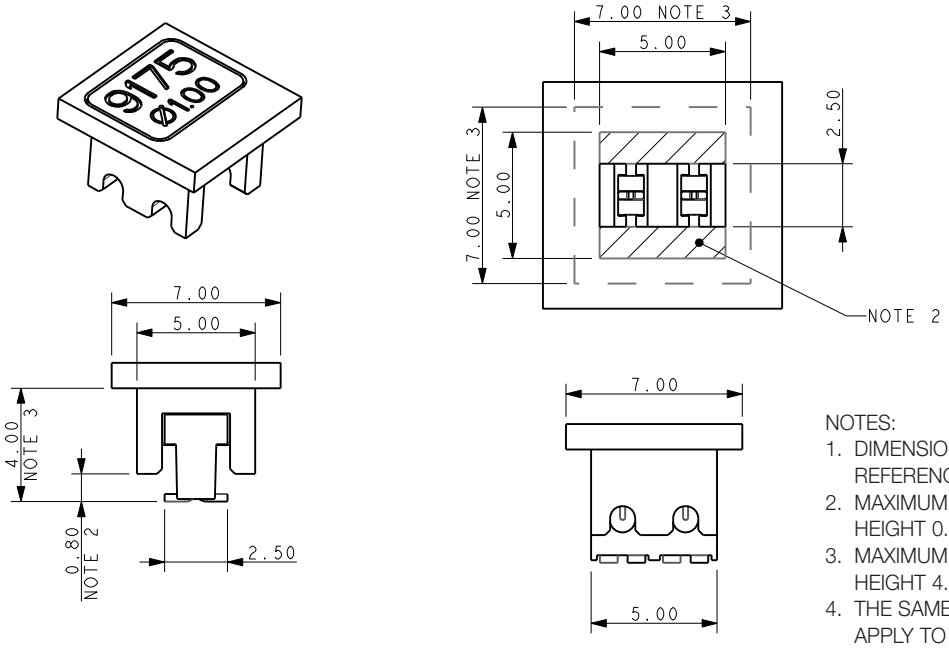
3 WAY



INSERTION TOOLING
REQUIRES HAND PRESS WITH FLAT ROCK PLATES

2 WAY TOOL

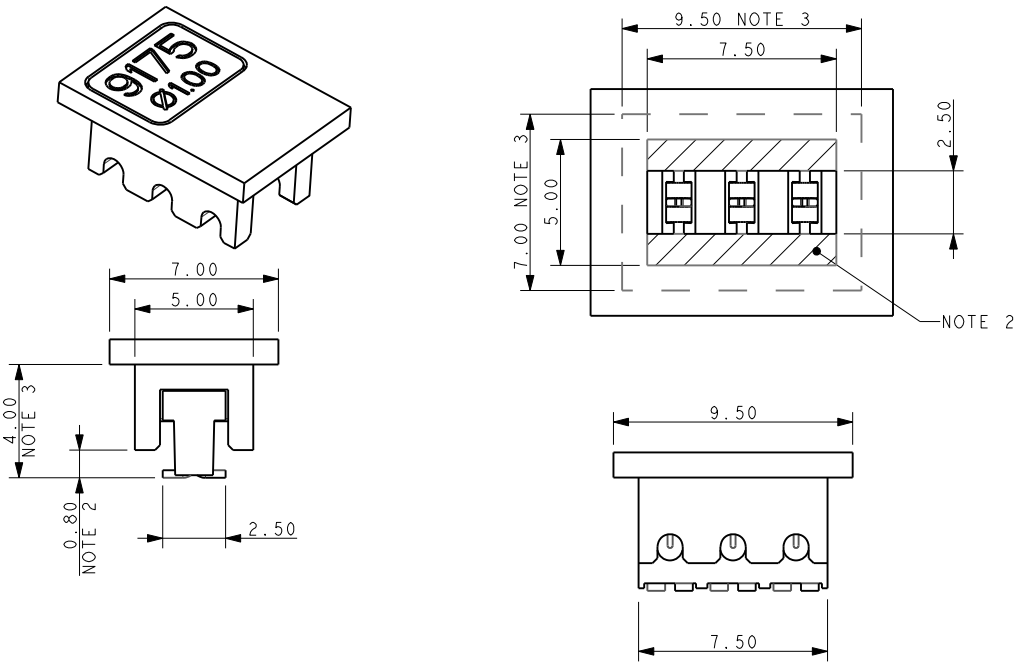
TOOL NUMBER 06-9175-7017-01-002
SKETCH SHOWS PCB RESTRICTED AREAS FOR ASSEMBLY TOOLING



NOTES:
1. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
2. MAXIMUM COMPONENT HEIGHT 0.80MM IN THIS AREA.
3. MAXIMUM COMPONENT HEIGHT 4.00MM IN THIS AREA.
4. THE SAME RESTRICTIONS APPLY TO ALL WIRE INSULATION DIAMETERS.

3 WAY TOOL

TOOL NUMBER 06-9175-7017-01-003
SKETCH SHOWS PCB RESTRICTED AREAS FOR ASSEMBLY TOOLING



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- Подбор комплектации
- Индивидуальный подход
- Гибкое ценообразование
- Работаем по 275 ФЗ

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