

# 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: -40°C to +125°C

### 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<br>26 Gauge Solid or Stranded | Min Ø 0.70<br>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

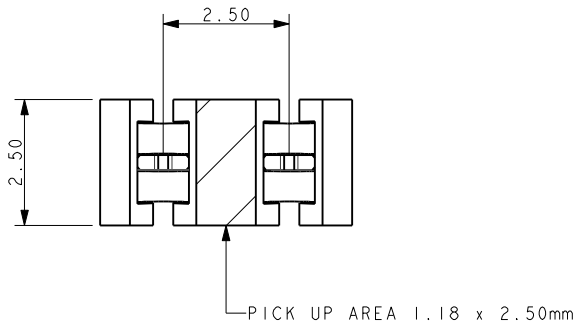


# SSL - Discrete Wire IDC

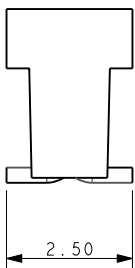
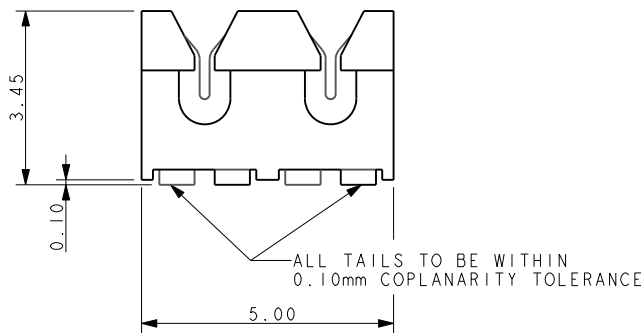
Series 9175



## 26-28 AWG 2 WAY IDC CONNECTOR

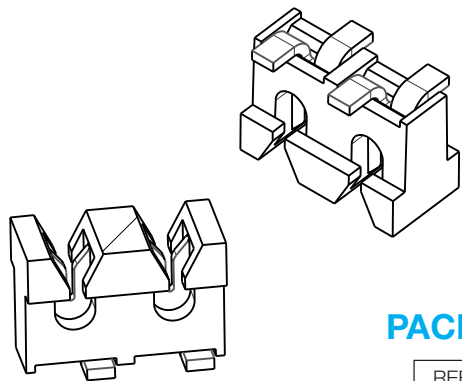
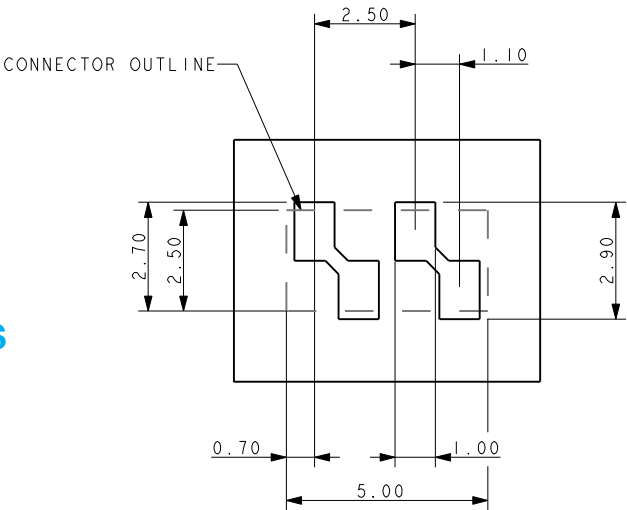


- NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
  2. CONTACT MATERIAL: PHOSPHORE BRONZE.  
INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.  
COLOR REFER TO PAGE 38.
  3. CONNECTOR DESIGNED TO ACCEPT 26 AND 28 GAUGE SOLID OR STRANDED WIRE.
  4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.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



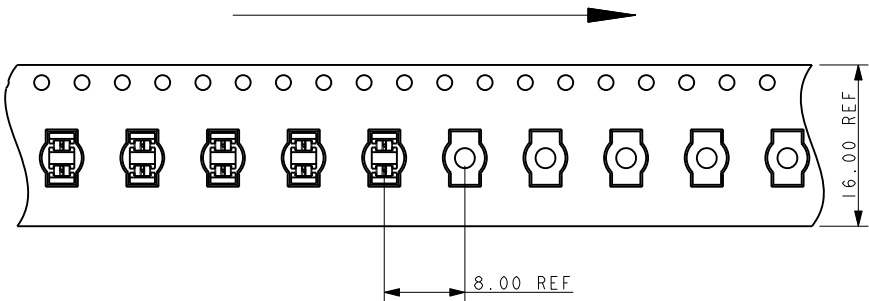
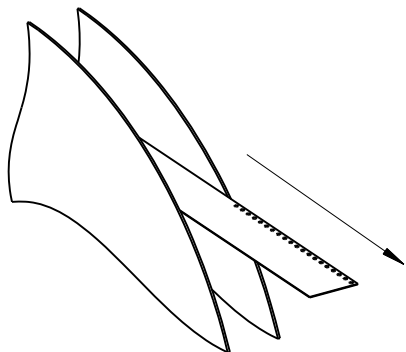
## SMT PCB LAYOUT

PURE TIN PADS



## PACKING DETAILS

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

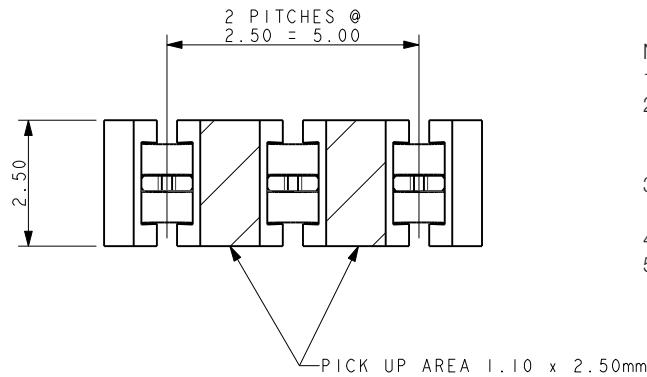


# SSL - Discrete Wire IDC



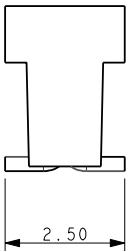
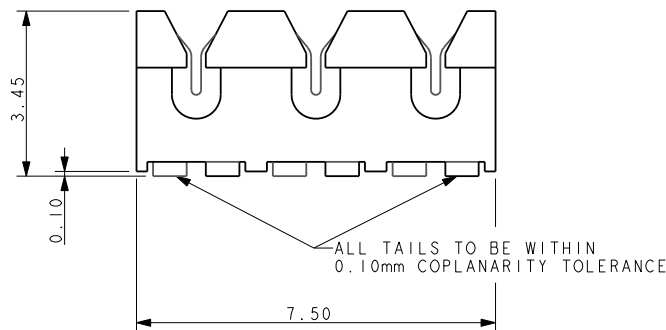
## Series 9175

### 26-28 AWG 3 WAY IDC CONNECTOR



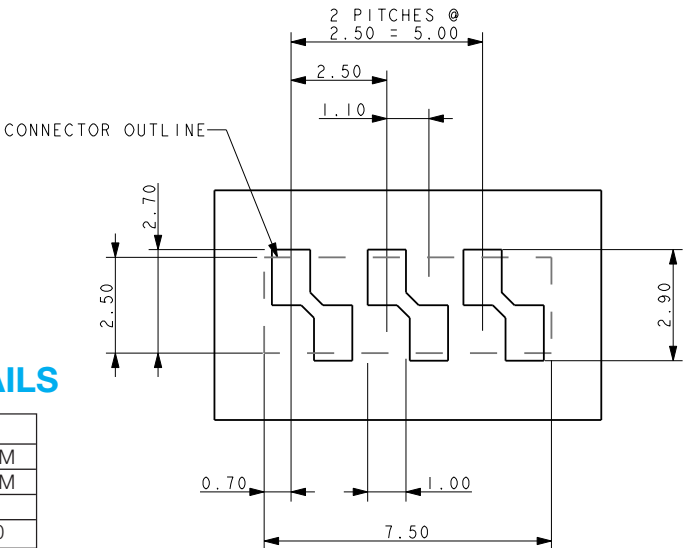
#### NOTES:

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.



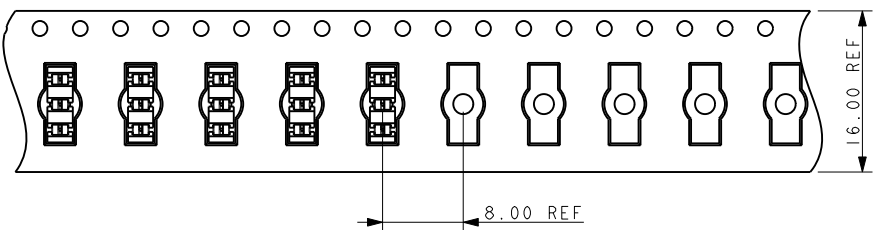
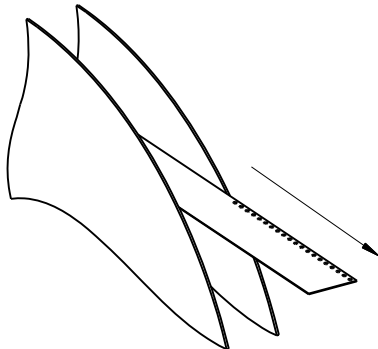
### SMT PCB LAYOUT

PURE TIN PADS



### PACKING DETAILS

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

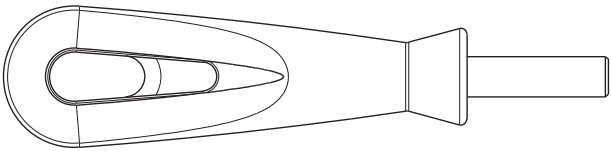


# SSL - Discrete Wire IDC



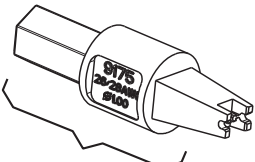
Series 9175

## 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 |



ALL METAL

### HIGH PRODUCTION Metal

| Max Insulation Dia | Tool Part Number    |
|--------------------|---------------------|
| Ø 1.00             | 06 9175 7017 01 000 |

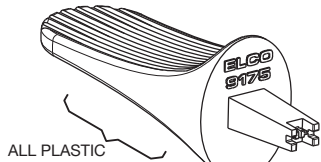


METAL SHANK

PLASTIC

### MED PRODUCTION Metal/Plastic

| Max Insulation Dia | Tool Part Number    |
|--------------------|---------------------|
| Ø 1.00             | 06 9175 7016 01 000 |



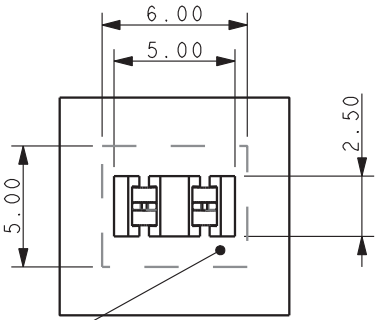
ALL PLASTIC

### LOW PRODUCTION Plastic

| Max Insulation Dia | Tool Part Number    |
|--------------------|---------------------|
| Ø 1.00             | 06 9175 7004 01 000 |

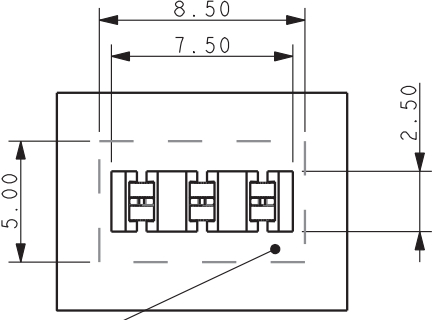
## CLEARANCE AREA ON PCB FOR HAND TOOLING

### 2 WAY



AREA TO BE KEPT CLEAR FOR TOOLING

### 3 WAY



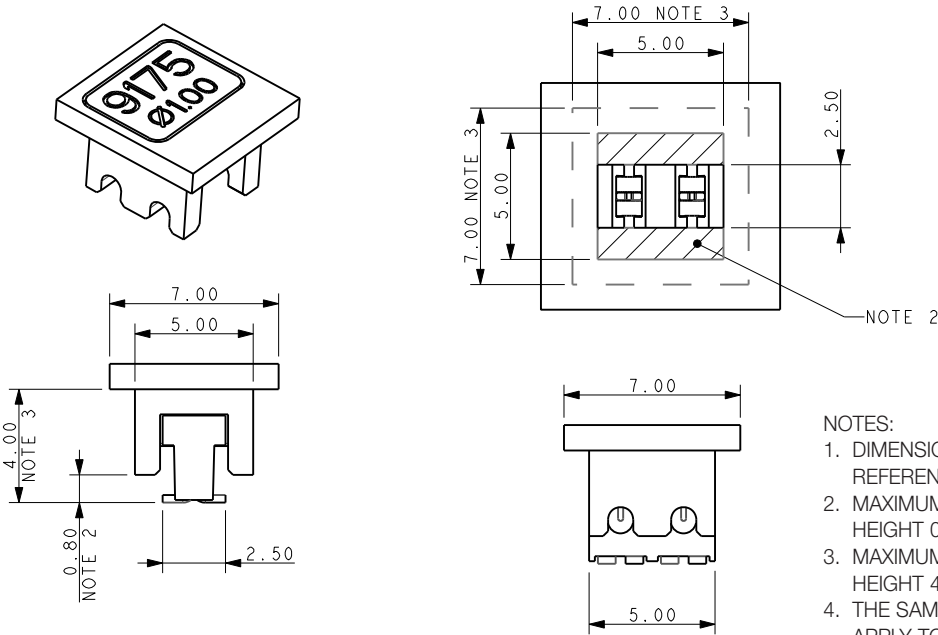
AREA TO BE KEPT CLEAR FOR TOOLING

### 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

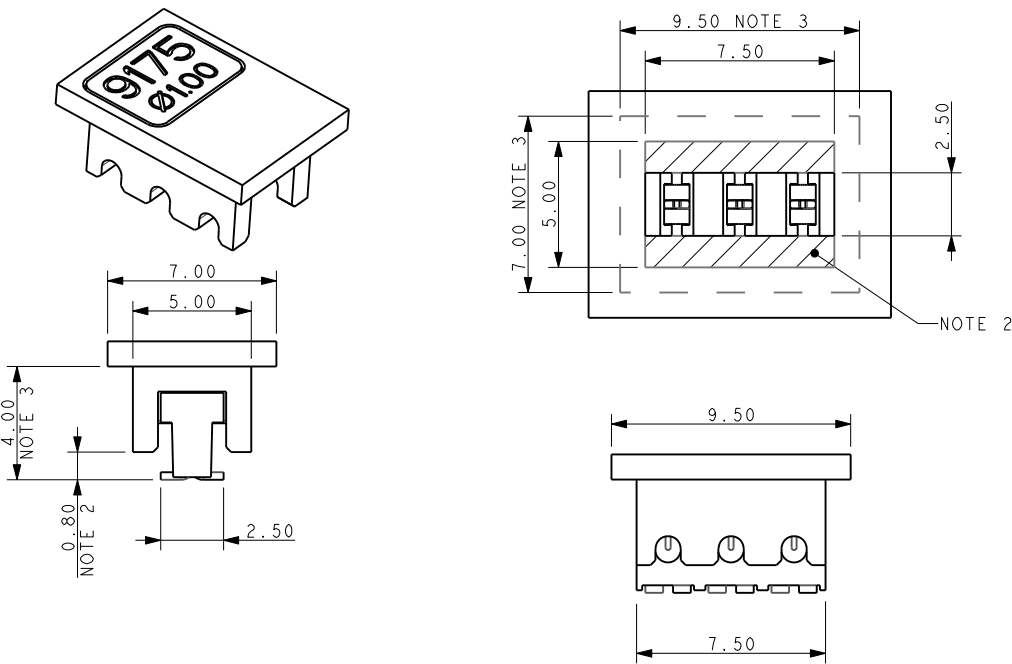


- NOTES:
1. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
  2. MAXIMUM COMPONENT HEIGHT 0.80MM IN THIS AREA.
  3. MAXIMUM COMPONENT HEIGHT 4.00MM IN THIS AREA.
  4. THE SAME RESTRICTIONS APPLY TO ALL WIRE INSULATION DIAMETERS.

#### 3 WAY TOOL

TOOL NUMBER 06-9175-7017-01-003

SKETCH SHOWS PCB RESTRICTED AREAS FOR ASSEMBLY TOOLING





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.