

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 | 9175 | 00X | | | | | | | | | |
|-----------|-------------|---|------|------------|---------|-----|---|---------|-----|---|---------|
| Prefix | Series | Number of Ways | | | | | | | | | |
| | | <table border="1"> <thead> <tr> <th>Code</th> <th>No of Ways</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>002</td> <td>2</td> <td>Page 39</td> </tr> <tr> <td>003</td> <td>3</td> <td>Page 40</td> </tr> </tbody> </table> | Code | No of Ways | Details | 002 | 2 | Page 39 | 003 | 3 | Page 40 |
| Code | No of Ways | Details | | | | | | | | | |
| 002 | 2 | Page 39 | | | | | | | | | |
| 003 | 3 | Page 40 | | | | | | | | | |

| 001 | | | | | | | | | |
|---|----------------------------|---------------------|-----------------|-----|----------------------------|------------|--|----------------------------|------------|
| Wire Gauge Size | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Code</th> <th>Accepted Wire Gauge</th> <th>Wire Insulation</th> </tr> </thead> <tbody> <tr> <td>001</td> <td>28 Gauge Solid or Stranded</td> <td>Min Ø 0.70</td> </tr> <tr> <td></td> <td>26 Gauge Solid or Stranded</td> <td>Max Ø 1.00</td> </tr> </tbody> </table> | Code | Accepted Wire Gauge | Wire Insulation | 001 | 28 Gauge Solid or Stranded | Min Ø 0.70 | | 26 Gauge Solid or Stranded | Max Ø 1.00 |
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| 001 | 28 Gauge Solid or Stranded | Min Ø 0.70 | | | | | | | |
| | 26 Gauge Solid or Stranded | Max Ø 1.00 | | | | | | | |

| X | | | | | | | | | |
|--|-------|-------------|-------------|---|-------|------------|---|-------|----------|
| Insulator Color | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Code</th> <th>Color</th> <th>Application</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Black</td> <td>Industrial</td> </tr> <tr> <td>1</td> <td>White</td> <td>Lighting</td> </tr> </tbody> </table> | Code | Color | Application | 0 | Black | Industrial | 1 | White | Lighting |
| Code | Color | Application | | | | | | | |
| 0 | Black | Industrial | | | | | | | |
| 1 | White | Lighting | | | | | | | |

| |
|------------------------|
| 06 |
| Plating Option |
| 06 = Pure Tin all over |

Certification: UL File #E320991

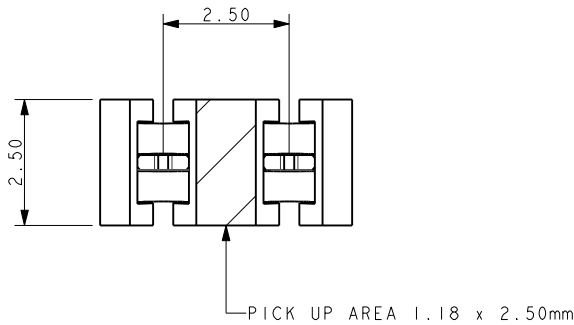


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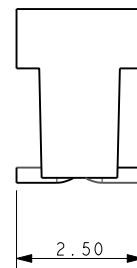
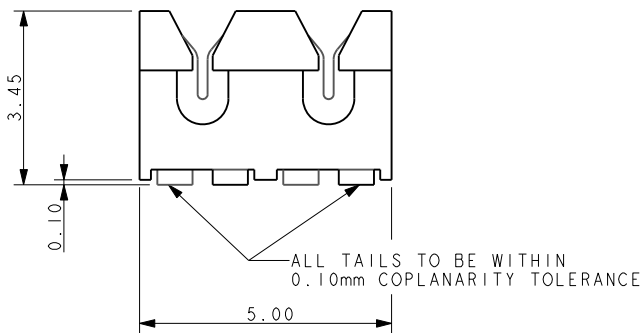
Series 9175

26-28 AWG 2 WAY IDC CONNECTOR



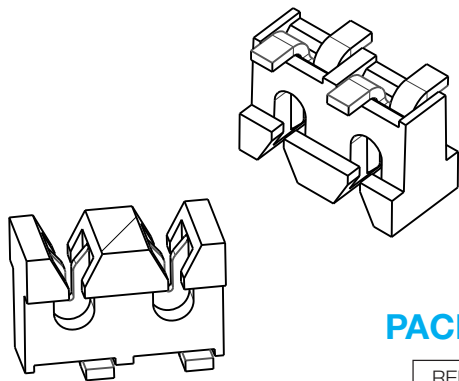
NOTES:

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.



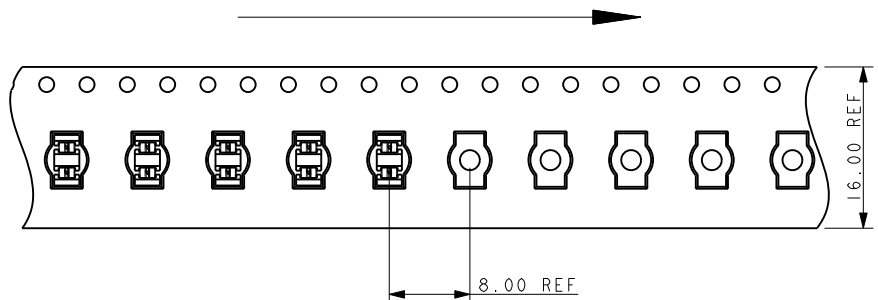
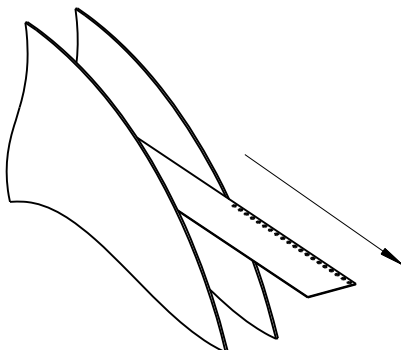
SMT PCB LAYOUT

PURE TIN PADS



PACKING DETAILS

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



SSL - Discrete Wire IDC



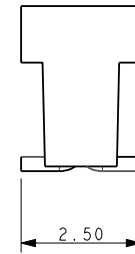
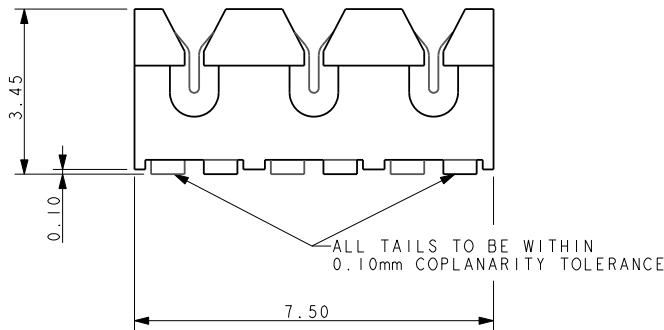
Series 9175

26-28 AWG 3 WAY IDC CONNECTOR



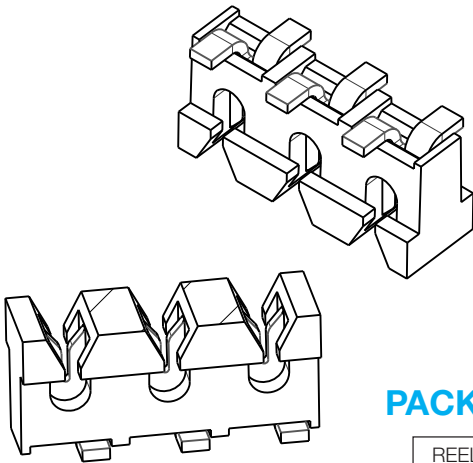
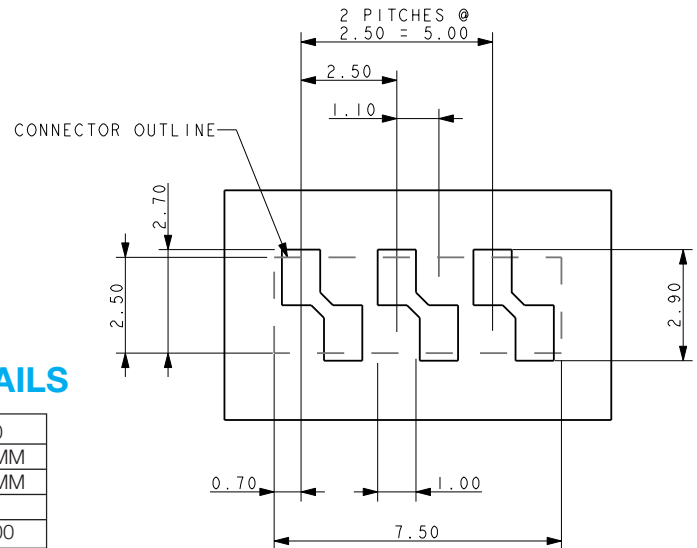
NOTES:

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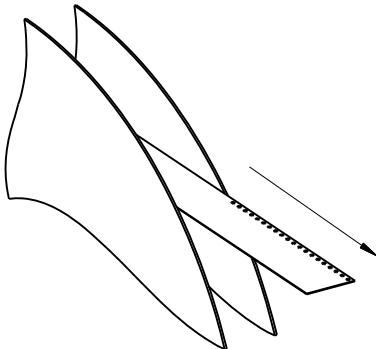
SMT PCB LAYOUT

PURE TIN PADS



PACKING DETAILS

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



SSL - Discrete Wire IDC



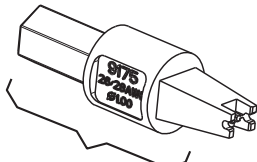
Series 9175

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 |
|--------------------|---------------------|
| ∅ 1.00 | 06 9175 7017 01 000 |



METAL SHANK

PLASTIC

MED PRODUCTION Metal/Plastic

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



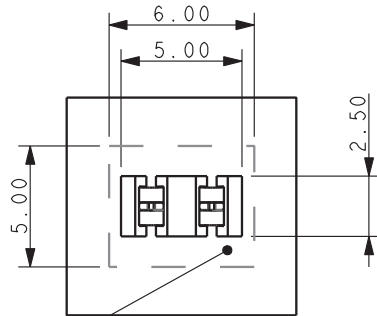
ALL PLASTIC

LOW PRODUCTION Plastic

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

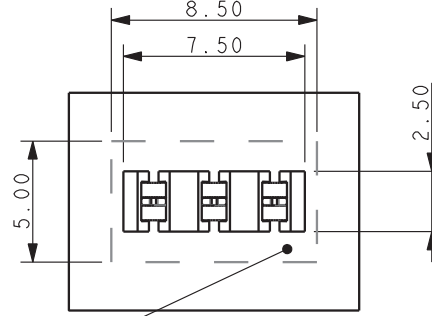
CLEARANCE AREA ON PCB FOR HAND TOOLING

2 WAY



AREA TO BE KEPT CLEAR FOR TOOLING

3 WAY



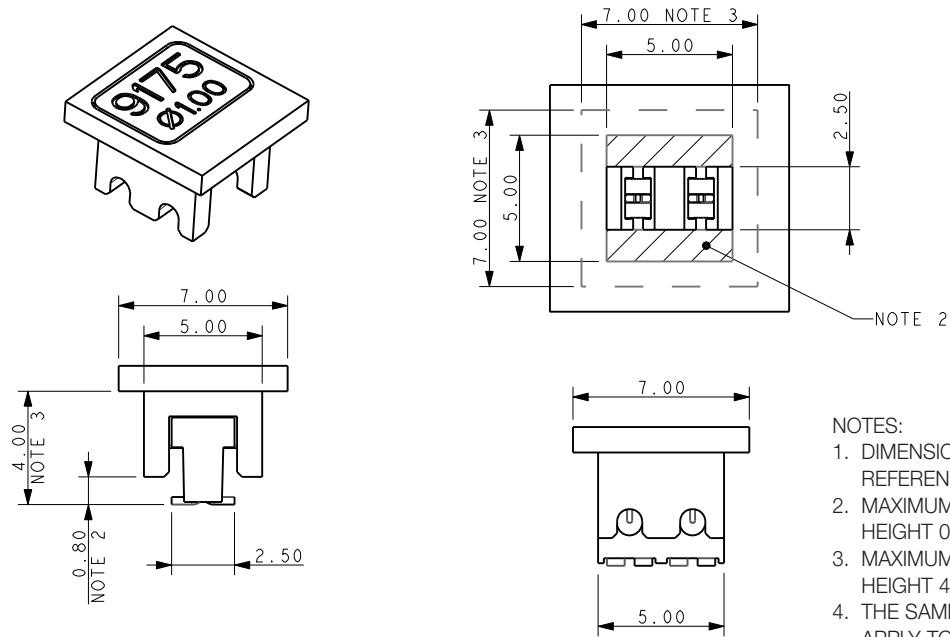
AREA TO BE KEPT CLEAR FOR TOOLING

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



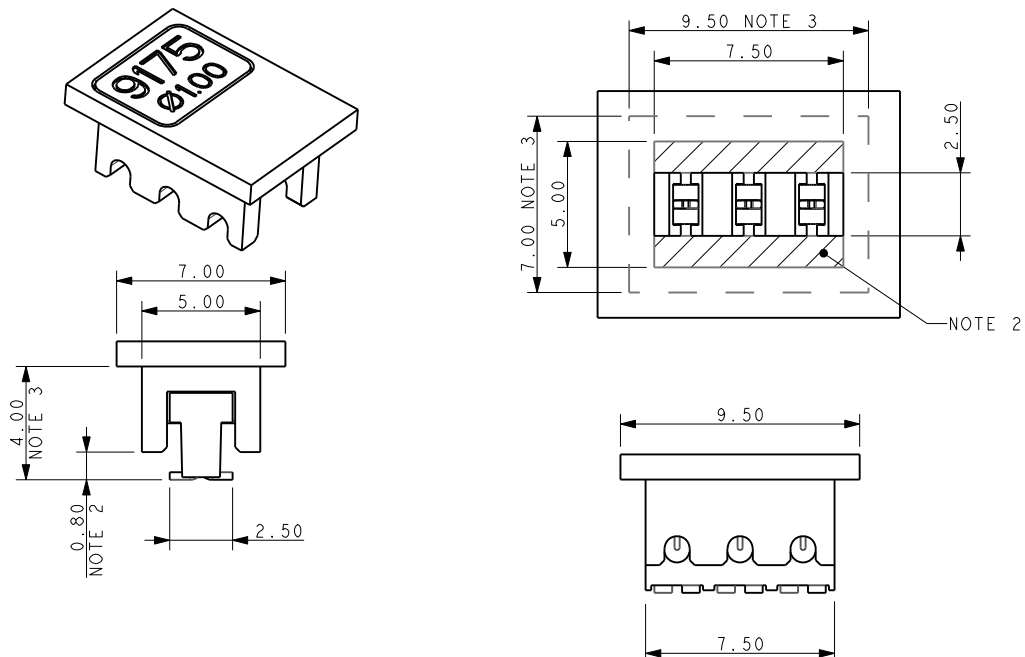
NOTES:

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 «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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