About Anglia

Anglia is the UK’s leading independent authorised distributor of semiconductors, optoelectronics, interconnect, and passive and electromechanical components. A signatory of the ADS SC21 programme, the company holds AS9120, ISO9001 & ISO14001 certifications and EEE-CECC qualification.

Technically adept, with an experienced team of staff, Anglia supports OEM and EMS companies in every sector of electronics manufacturing. Suppliers include some of the world’s leading electronic component brands, complemented by many smaller companies with leadership in their chosen technologies.

Anglia stocks over 700 million components from 500,000 product lines in the UK ready for same-day despatch. It aims to minimise logistics and reduce customer transaction costs through services that include KAN-BAN, EDI and customer-dedicated inventory culminating in accurate on-time delivery.

Anglia is driven by an ethic of ever-improving customer understanding and, as a privately owned business, aims to provide a fast, consistent and highly responsive service.

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Anglia is driven by an ethic of ever-improving customer understanding and, as a privately owned business, aims to provide a fast, consistent and highly responsive service.
2-PIECE BOARD-TO-BOARD AND WIRE-TO-BOARD CONNECTORS

Cabled Plug
Horizontal Socket
Shorting Socket
Horizontal Plug
Retaining Clip
Top Load Socket

1 PIECE BOARD-TO-BOARD
Card Edge

WIRE-TO-BOARD
Discrete Wire Insulation Displacement
26-28 AWG
18-24 AWG
14-20 AWG
Discrete Wire IDC & Cap 18-24 AWG
Discrete Wire IDC & Cap 22-24 AWG
Accessory Caps: 18-24 AWG

NOTICE: Specifications are subject to change without notice. Contact your nearest AVX Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable, but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements or suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures may not be required. Specifications are typical and may not apply to all applications.
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The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. These single sided SMT connectors are perfect for both FR4 and metal boards where you need to butt the boards up together to minimize separation. Availability of both white and black insulation colors make them perfect for lighting as well as industrial applications. With sizes from 2p-6p, these high reliability connectors boast gold plated beryllium copper receptacle contacts for harsh environments.

Additional components in the 9159 product family include:
- SSL - Cabled Plug; Supports wire-to-board applications (11-9159)
- SSL - Horizontal Socket; Standard 2-Piece solution (20-9159)
- SSL - Top Load Socket; ZIF style for field reparability (22-9159)
- SSL - Shorting Socket; Two position (58-9159)
- SSL - Retaining Clip; Latches BTB connectors together (80-9159)

**APPLICATIONS**
- Coplanar PCB mating in SSL products
- LED linear lighting strips
- Application Notes; refer to 201-01-123

**FEATURES AND BENEFITS**
- Single sided SMT; supports FR4 and metal PCB’s
- 5 Amp current rating; exceeds general market needs
- 5.5mm mated width; minimizes PCB space to decrease LED pitch
- Gold plated BeCu spring contacts; reliability for harsh environments
- Optional retaining clip; provides positive connector mating during vibration
- Available in white; supports SSL market preferences

**ELECTRICAL**
- Current Rating: 5 Amps / Contact
- Voltage Rating: 125 VAC

**ENVIRONMENTAL**
- Operating Temperature: -40ºC to +125ºC

**MECHANICAL**
- Insulator Material: Nylon; VL94VO
- Contact Material: BeCu / Phos Bronze
- Plating: Gold / Tin over Nickel
- Durability: 10 Cycles

**HOW TO ORDER**

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<thead>
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<th>Series</th>
<th>XXX</th>
<th>01</th>
<th>X</th>
<th>16</th>
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<tr>
<td>10</td>
<td>9159</td>
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</table>

**Number of Ways**
- Code 002: 2 Page 4
- Code 003: 3 Page 5
- Code 004: 4 Page 6
- Code 005: 5 Page 7
- Code 006: 6 Page 8

**2 Part PCB Strip Connector**
- Pitch 01 = 3mm

**Insulator Color**
- Code 0: Black / Industrial
- Code 1: White / Lighting

**Plating Option**
- Code 16: Gold in Contact Area
- Code 16: Tin on Solder Tail

**Contact Bracket**
- Code 16: Gold over Nickel
- Code 16: Tin over Nickel
SSL - Horizontal Plug
Series 9159

PLUG
2 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1,400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.

2 WAY PCB BOARD LAYOUT

PACKING DETAILS

NOTE:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1,400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.
SSL - Horizontal Plug
Series 9159

PLUG
3 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.

3 WAY PCB BOARD LAYOUT

PACKING DETAILS

anglia +44 (0)1945 47 47 47 www.anglia.com info@anglia.com
SSL - Horizontal Plug
Series 9159

PLUG
4 WAY 2 PART PCB STRIP CONNECTOR

MARKER IN LINE WITH POSITION 1

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.

4 WAY PCB BOARD LAYOUT

PACKING DETAILS
SSL - Horizontal Plug
Series 9159

PLUG
5 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.

PACKING DETAILS

5 WAY PCB BOARD LAYOUT

NOTES:
- 4 SPACES
- 5 PADS 2.00x1.20
- 2 PADS 1.60x1.50
- POSITION 1
SSL - Horizontal Plug
Series 9159

PLUG
6 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 8.

PACKING DETAILS
SSL - Horizontal Plug
Series 9159

80-9159-4200-00-000
ACCESSORY RETAINING CLIP

PLUG ASSEMBLY – FOR REFERENCE ONLY
CLIP INSERTED INTO 10-9159-00X-101-X06

HAND INSERTION TOOL
06-9159-7025-01-000

MATED ASSEMBLY – FOR REFERENCE ONLY
10-9159-00X-101-X06 MATED WITH 20-9159-00X-X06

NOTES:
1. CLIP TO RETAIN MATED PAIR PLUG AND SOCKET. NOT SUPPLIED WITH CONNECTOR.
2. MATERIAL: STAINLESS STEEL.
3. PACKING IN BAGS, 1400 PER BAG.
4. TAIL INSERTED INTO SLOT OF 9159 2 PART PLUG (10-9159-00X-101-006). LEADING EDGE CLIPS OVER SOCKET.
5. ALL DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
6. RECOMMENDED 1 CLIP IN 2, 3 AND 4 WAY. 2 CLIPS IN 5 AND 6 WAY. POSITIONS AT CUSTOMER DISCRETION.
SSL - Cable Plug
Series 9159

The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. The cabled plug was developed to bring power and signals onto the PCB’s while keeping the same board level interface. This allows the designer to build a single PCB with a receptacle on one end and a plug on the other end to minimize cost and inventory. Regardless of where the PCB is used in the system, the cabled plug connector will then create the connection to the outside world. The optional latch can be inserted into the plug housing to assure positive attachment to the PCB in harsh environments without having to change the PCB connector.

Additional components in the 9159 product family include:
- SSL - Horizontal Plug; Standard 2-Piece solution (10-9159)
- SSL - Horizontal Socket; Standard 2-Piece solution (20-9159)
- SSL - Top Load Socket; ZIF style for field reparability (22-9159)
- SSL - Shorting Socket; Two position (58-9159)
- SSL - Retaining Clip; Latches BTB connectors together (80-9159)

**APPLICATIONS**
- Provided Wire-to-Board capabilities to standard 9159 2-Piece connector system
- Application Notes; refer to 201-01-123

**FEATURES AND BENEFITS**
- Mates with standard horizontal socket; no need to change any connectors
- 5 Amp current rating; exceeds general market needs
- Wires are soldered into connector with tie wrap strain relief; simplicity
- Optional latch; provides positive attachment to PCB connector
- Available in white; supports SSL market preferences

**ELECTRICAL**
- Current Rating: 5 Amps / Contact
- Voltage Rating: 125 VAC

**ENVIRONMENTAL**
- Operating Temperature: -40ºC to +125ºC

**MECHANICAL**
- Insulator Material: Nylon: VL94VO
- Contact Material: BeCu / Phos Bronze
- Plating: Gold / Tin over Nickel
- Durability: 10 Cycles

**HOW TO ORDER**

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<thead>
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<th>Prefix</th>
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<th>XXX</th>
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**NOTES:** Connectors are supplied with cable ties (see page 17). Covers/Latches are sold separately (see pages 15-16 for ordering codes).
SSL - Cable Plug
Series 9159

PLUG WIRED
2 WAY 2 PART 9159 LIGHTING CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
   SPARES CAN BE ORDERED, REFER TO PAGE 17.
3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
4. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 9.
5. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL
   TIN PLATED ON TAILS.
6. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
7. FOR ACCESSORY COVERS AND LATCHES REFER TO PAGES 15 AND 16.

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL
SSL - Cable Plug
Series 9159

PLUG WIRED
3 WAY 2 PART 9159 LIGHTING CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
   SPARES CAN BE ORDERED, REFER TO PAGE 17.
3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
4. INSULATOR MATERIAL: NYLON 46, COLOR REFER TO PAGE 9.
5. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
6. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
7. FOR ACCESSORY COVERS AND LATCHES REFER TO PAGES 15 AND 16.

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL
SSL - Cable Plug
Series 9159

PLUG WIRED
4 WAY 2 PART 9159 LIGHTING CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
   SPARES CAN BE ORDERED, REFER TO PAGE 17.
3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
4. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 9.
5. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL.
   TIN PLATED ON TAILS.
6. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
7. FOR ACCESSORY COVERS AND LATCHES REFER TO PAGES 15 AND 16.

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL

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SSL - Cable Plug
Series 9159

PLUG WIRED
5 WAY 2 PART 9159 LIGHTING CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
   SPARES CAN BE ORDERED, REFER TO PAGE 17.
3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
4. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 9.
5. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL
   TIN PLATED ON TAILS.
6. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
7. FOR ACCESSORY COVERS AND LATCHES REFER TO PAGES 15 AND 16.

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL
SSL - Cable Plug
Series 9159

PLUG WIRED
6 WAY 2 PART 9159 LIGHTING CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
   SPARES CAN BE ORDERED, REFER TO PAGE 17.
3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
4. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 9.
5. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL
   TIN PLATED ON TAILS.
6. PACKING IN TAPE AND REEL, QUANTITY PER REEL 700.
7. FOR ACCESSORY COVERS AND LATCHES REFER TO PAGES 15 AND 16.

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL

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SSL - Cable Plug
Series 9159

PLUG WIRED COVERS
ACCESSORY NOT SUPPLIED WITH CONNECTOR ASSEMBLY

2 WAY COVER 60-9159-3302-0X-000

3 WAY COVER 60-9159-3303-0X-000

4 WAY COVER 60-9159-3304-0X-000

5 WAY COVER 60-9159-3305-0X-000

6 WAY COVER 60-9159-3306-0X-000

NOTES:
1. COVER (SLIDE ON) AVAILABLE TO PROTECT CABLE ENTRY.
2. OPTION COMPONENT. ORDER SEPARATELY.
3. PACKED IN BAGS, 1400 PIECES PER BAG.
4. MAXIMUM OUTER WIRE SIZE, 1.8MM DIAMETER INSULATION.
5. MATERIAL: GLASS FILLED NYLON 46. COLOR REFER TO PAGE 9.
6. COLOR OPTIONS SEE PAGE 9.
7. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
8. TO BE ASSEMBLED BEFORE CABLE TIE.
SSL - Cable Plug
Series 9159

PLUG WIRED LATCHES
ACCESSORY NOT SUPPLIED WITH CONNECTOR ASSEMBLY

LATCH 60-9159-3402-0X-000
USED ON 2, 4 AND 6 WAY ASSEMBLIES

LATCH 60-9159-3403-0X-000
USED ON 3 AND 5 WAY ASSEMBLIES

NOTES:
1. LATCH AVAILABLE TO RETAIN MATED PLUG.
2. OPTIONAL COMPONENT, ORDER SEPARATELY. SEE PAGE 17.
3. PACKAGED IN BAGS, 1400 PIECES PER BAG.
4. MATERIAL: GLASS FILLED NYLON 46. COLOR REFER TO PAGE 9.
5. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
6. TO BE ASSEMBLED BEFORE COVER.
SSL - Cable Plug
Series 9159

PLUG WIRED ACCESSORY ORDERING CODES

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<th>Latch (see page 8)</th>
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<td>60-9159-3306-0X-000</td>
<td>60-9159-3402-0X-000</td>
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"X" For color option refer to table on page 1.

CABLE TIE

Supplied in bags with each reel of connector assemblies. Color White.
For additional ties order code 90-2211-7092-00-000. Packed in bags, 700 pieces per bag.

PLUG WIRED 3 ASSEMBLED OPTIONS

- PLUG ASSEMBLY
- PLUG ASSEMBLY WITH COVER
- PLUG ASSEMBLY WITH COVER AND LATCH
SSL - Horizontal Socket
Series 9159

The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. These single sided SMT connectors are perfect for both FR4 and metal boards where you need to butt the boards up together to minimize separation. Availability of both white and black insulation colors make them perfect for lighting as well as industrial applications. With sizes from 2p-6p, these high reliability connectors boast gold plated beryllium copper receptacle contacts for harsh environments.

Additional components in the 9159 product family include:
• SSL - Horizontal Plug; Standard 2-Piece solution (10-9159)
• SSL - Cabled Plug; Supports wire-to-board applications (11-9159)
• SSL - Top Load Socket; ZIF style for field reparability (22-9159)
• SSL - Shorting Socket; Two position (58-9159)
• SSL - Retaining Clip; Latches BTB connectors together (80-9159)

APPICATIONS
• Coplanar PCB mating in SSL products
• LED linear lighting strips
• Application Notes; refer to 201-01-123

FEATURES AND BENEFITS
• Single sided SMT; supports FR4 and metal PCB’s
• 5 Amp current rating; exceeds general market needs
• 5.5mm mated width; minimizes PCB space to decrease LED pitch
• Gold plated BeCu spring contacts; reliability for harsh environments
• Optional retaining clip; provides positive connector mating during vibration
• Available in white; supports SSL market preferences

APPLICATIONS
• Coplanar PCB mating in SSL products
• LED linear lighting strips
• Application Notes; refer to 201-01-123

FEATURES AND BENEFITS
• Single sided SMT; supports FR4 and metal PCB’s
• 5 Amp current rating; exceeds general market needs
• 5.5mm mated width; minimizes PCB space to decrease LED pitch
• Gold plated BeCu spring contacts; reliability for harsh environments
• Optional retaining clip; provides positive connector mating during vibration
• Available in white; supports SSL market preferences

HOW TO ORDER

ELECTRICAL
• Current Rating: 5 Amps / Contact
• Voltage Rating: 125 VAC

ENVIRONMENTAL
• Operating Temperature:
  -40ºC to +125ºC

MECHANICAL
• Insulator Material: Nylon; VL94VO
• Contact Material: BeCu / Phos Bronze
• Plating: Gold / Tin over Nickel
• Durability: 10 Cycles
SSL - Horizontal Socket
Series 9159

SOCKET
2 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

2 WAY PCB BOARD LAYOUT

PACKING DETAILS
SSL - Horizontal Socket
Series 9159

SOCKET
3 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

3 WAY PCB BOARD LAYOUT

PACKING DETAILS
SSL - Horizontal Socket
Series 9159

SOCKET
4 WAY 2 PART PCB STRIP CONNECTOR

MARKER IN LINE WITH POSITION 1

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
   COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

4 WAY PCB BOARD LAYOUT

PACKING DETAILS

CONTACTS: 2 WAY TYP

4 WAY PCB BOARD LAYOUT PACKING DETAILS

anglia +44 (0)1945 47 47 47 www.anglia.com info@anglia.com
SSL - Horizontal Socket
Series 9159

SOCKET
5 WAY 2 PART PCB STRIP CONNECTOR

MARKER IN LINE WITH POSITION 1

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

5 WAY PCB BOARD LAYOUT

PACKING DETAILS

4 SPACES Ø 3.00 x 12.00

POSITION 1

5 PADS 2.00 x 1.20
2 PADS 1.80 x 1.50

52.00

12.00
SSL - Horizontal Socket
Series 9159

SOCKET
6 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
   COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

6 WAY PCB BOARD LAYOUT

PACKING DETAILS

anglia  +44 (0)1945 47 47 47      www.anglia.com      info@anglia.com
SSL - Top Load Socket
Series 9159

The 9159 series of Board-to-Board interconnect system allows two PCB's to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. The top loading socket allows complete PCB's to be replaced in the field without having to disassemble the entire strip of boards. The connector has a two part insulator whereby the top of the connector will slide open allowing the plug connector to be pulled out either vertically or at a slight angle. Once the PCB is replaced, the cover is slid back like a Zero Insertion Force (ZIF) connector to the closed position. The PCB layout is identical to the standard horizontal socket to maintain family commonality at the PCB level.

Additional components in the 9159 product family include:
- SSL - Horizontal Plug; Standard 2-Piece solution (10-9159)
- SSL - Cabled Plug; Supports wire-to-board applications (11-9159)
- SSL - Horizontal Socket; Standard 2-Piece solution (20-9159)
- SSL - Shorting Socket; Two position (58-9159)
- SSL - Retaining Clip; Latches BTB connectors together (80-9159)

## APPLICATIONS
- Coplanar PCB mating in SSL products
- LED linear lighting strips
- Application Notes; refer to 201-01-123

## FEATURES AND BENEFITS
- Slide open top; allows field reparability at the light fixture level
- Mates with standard horizontal or cabled plug; no need to change any connectors
- 5 Amp current rating; exceeds general market needs
- Gold plated BeCu spring contacts; reliability for harsh environments
- Available in white; supports SSL market preferences

## ELECTRICAL
- Current Rating: 5 Amps / Contact
- Voltage Rating: 125 VAC

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

## MECHANICAL
- Insulator Material: Nylon: VL94VO
- Contact Material: BeCu / Phos Bronze
- Plating: Gold / Tin over Nickel
- Durability: 10 Cycles

## HOW TO ORDER

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Socket</th>
<th>Series</th>
<th>Number of Ways</th>
<th>2 Part PCB Strip Connector</th>
<th>Color Options</th>
<th>Plating Option</th>
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<td></td>
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</tbody>
</table>
SSL - Top Load Socket
Series 9159

SOCKET TOP LOADING
2 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46, COLOR REFER TO PAGE 24.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. RESTRICTED COMPONENT HEIGHT UNDER CATCH,
   2.20MM MAXIMUM.
8. RESTRICTED COMPONENT HEIGHT UNDER CATCH,
   0.40MM MAXIMUM.
9. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

2 WAY PCB BOARD LAYOUT

PACKING DETAILS

anglia +44 (0)1945 47 47 47 www.anglia.com info@anglia.com
SSL - Top Load Socket
Series 9159

SOCKET TOP LOADING
3 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 24.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 2.20MM MAXIMUM.
8. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 0.40MM MAXIMUM.
9. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

3 WAY PCB BOARD LAYOUT

PACKING DETAILS
SSL - Top Load Socket
Series 9159

SOCKET TOP LOADING
4 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
   COLOR REFER TO PAGE 24.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 2.20MM MAXIMUM.
8. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 0.40MM MAXIMUM.
9. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
SSL - Top Load Socket
Series 9159

SOCKET TOP LOADING
5 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 24.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 2.20MM MAXIMUM.
8. RESTRICTED COMPONENT HEIGHT UNDER CATCH, 0.40MM MAXIMUM.
9. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

5 WAY PCB BOARD LAYOUT

PACKING DETAILS
SSL - Top Load Socket
Series 9159

SOCKET TOP LOADING
6 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO
   PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE
   DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
   COLOR REFER TO PAGE 24.
4. CONTACT MATERIAL: COPPER
   ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY,
   TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. RESTRICTED COMPONENT HEIGHT
   UNDER CATCH, 2.20MM MAXIMUM.
8. RESTRICTED COMPONENT HEIGHT
   UNDER CATCH, 0.40MM MAXIMUM.
9. PACKING TAPE AND REEL,
   QUANTITY 1400 PER REEL.

6 WAY PCB BOARD LAYOUT
PACKING DETAILS

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SSL - Top Load Socket
Series 9159

CONNECTOR ASSEMBLY

COVER FORWARD (LOCKED)  COVER SLID BACK

SLIDE TOP COVER BACK  SLIDE TOP COVER BACK

DROP PCB ASSEMBLY ONTO MATING CONNECTORS

SLIDE TOP COVER FORWARD  SLIDE TOP COVER FORWARD
SSL – Shorting Socket
Series 9159

The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating with a 5 Amp current rating in the smallest package available. The 2 position shorting socket was designed to plug onto the last PCB in the lighting strip to short the two contacts together, closing the electrical loop. Just as the cabled plug brings power and signals onto the light strip, the shorting socket completes the circuit while maintaining a single board design.

Additional components in the 9159 product family include:
- SSL - Horizontal Plug; Standard 2-Piece solution (10-9159)
- SSL - Cabled Plug; Supports wire-to-board applications (11-9159)
- SSL - Horizontal Socket; Standard 2-Piece solution (20-9159)
- SSL - Top Load Socket; ZIF style for field reparability (22-9159)
- SSL - Retaining Clip; Latches BTB connectors together (80-9159)

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
<th>FEATURES AND BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Coplanar PCB mating in SSL products</td>
<td>• Mates to the standard plug connector; does not require a new connector</td>
</tr>
<tr>
<td>• LED linear lighting strips</td>
<td>• Integral latching mechanism; Provides positive attachment to the plug</td>
</tr>
<tr>
<td>• Application Notes; refer to 201-01-123</td>
<td>• Gold plated BeCu spring contacts; reliability for harsh environments</td>
</tr>
<tr>
<td></td>
<td>• Available in white; supports SSL market preferences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ELECTRICAL</th>
<th>ENVIRONMENTAL</th>
<th>MECHANICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Current Rating: 5 Amps / Contact</td>
<td>• Operating Temperature: -40ºC to +125ºC</td>
<td>• Insulator Material: Nylon: VL94V0</td>
</tr>
<tr>
<td>• Voltage Rating: 125 VAC</td>
<td></td>
<td>• Contact Material: BeCu / Phos Bronze</td>
</tr>
</tbody>
</table>

HOW TO ORDER
58 9159 002 000 006
SSL – Shorting Socket
Series 9159

PACKING DETAILS
SSL - One Piece Card Edge
Series 9159

The 9159 series of Board-to-Board interconnect system allows two PCB’s to be mated end-to-end creating strips of LED lighting. Designed specifically for the unique Solid State Lighting (SSL) market requiring coplanar (horizontal-to-horizontal) PCB mating. The 1-Piece Card Edge connector was developed to provide a reliable, low cost and simple means of connecting multiple PCB’s together. The single stamped contact has dual contact beams to guarantee a high contact force on standard 1.6mm PCB’s. These connectors are available in 2 through 5 positions and are on 2.0mm pad pitch centers to provide a 3 amp continuous rating. Available in both black and white to meet the application requirements.

**APPLIANCES**
- Coplanar PCB mating in SSL products
- LED linear lighting strips

**FEATURES AND BENEFITS**
- Dual contacts provide positive contact force for enhanced reliability
- Mates with standard 1.6 ± 0.15mm PCB on 2.0mm pad pitch
- 3 amp current rating for high current applications
- Available in white; supports SSL market preferences

**ELECTRICAL**
- Current Rating: 3 Amps / Contact
- Voltage Rating: 250 VAC

**ENVIRONMENTAL**
- Operating Temperature: -55ºC to +125ºC

**MECHANICAL**
- Insulator Material: Nylon 46: UL94HB
- Contact Material: Phosphor Bronze
- Plating: Tin over Nickel
- Durability: 5 Cycles

**HOW TO ORDER**

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Series</th>
<th>Number of Ways</th>
</tr>
</thead>
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<tr>
<td>005</td>
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</tr>
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<thead>
<tr>
<th>Single Part PCB Strip Connector</th>
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<tbody>
<tr>
<td>PCB Thickness 01 = 1.60 ± 0.15</td>
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<thead>
<tr>
<th>Insulator Color</th>
<th>Application</th>
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<tbody>
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<td>1 White</td>
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<th>Code</th>
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<th>Application</th>
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<tbody>
<tr>
<td>06</td>
<td>Pure Tin</td>
<td>all over</td>
</tr>
</tbody>
</table>

AVX - A KYOCERA GROUP COMPANY

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SSL - One Piece Card Edge
Series 9159

2 WAY SINGLE PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-118.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
3. ARROW TO INDICATE CONTACT POSITION 1.
4. INSULATOR MATERIAL: NYLON 46, UL94 HB, COLOR SEE PAGE 33.
5. CONTACT MATERIAL: COPPER ALLOY, TIN PLATED ALL OVER.
6. PCB PAD, TIN PLATED.

NOTES:

1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-118.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
3. ARROW TO INDICATE CONTACT POSITION 1.
4. INSULATOR MATERIAL: NYLON 46, UL94 HB, COLOR SEE PAGE 33.
5. CONTACT MATERIAL: COPPER ALLOY, TIN PLATED ALL OVER.
6. PCB PAD, TIN PLATED.

2 WAY PCB BOARD LAYOUT
THICKNESS 1.60 ± 0.15

PACKING DETAILS

| REEL QTY | 750 |
| LEADER | 500MM |
| TRAILER | 500MM |
| REEL PER BOX | TBD |

NOTE 3

NOTE 3
SSL - One Piece Card Edge
Series 9159

3 WAY SINGLE PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-118.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
3. ARROW TO INDICATE CONTACT POSITION 1.
4. INSULATOR MATERIAL: NYLON 46, UL94 HB, COLOR SEE PAGE 33.
5. CONTACT MATERIAL: COPPER ALLOY, TIN PLATED ALL OVER.
6. PCB PAD, TIN PLATED.

3 WAY PCB BOARD LAYOUT
THICKNESS 1.60 ± 0.15

PACKING DETAILS

| REEL QTY | 750 |
| LEADER   | 500MM |
| TRAILER  | 500MM |
| REEL PER BOX | TBC |

0.15
SSL - One Piece Card Edge
Series 9159

4 WAY SINGLE PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-118.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
3. ARROW TO INDICATE CONTACT POSITION 1.
4. INSULATOR MATERIAL: NYLON 46, UL94 HB, COLOR SEE PAGE 33.
5. CONTACT MATERIAL: COPPER ALLOY, TIN PLATED ALL OVER.
6. PCB PAD, TIN PLATED.

4 WAY PCB BOARD LAYOUT
THICKNESS 1.60 ± 0.15

PACKING DETAILS
| REEL QTY | 750 |
| LEADER  | 500MM |
| TRAILER | 500MM |
| REEL PER BOX | TBC |
**SSL - One Piece Card Edge**

Series 9159

**5 WAY SINGLE PART PCB STRIP CONNECTOR**

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-118.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
3. ARROW TO INDICATE CONTACT POSITION 1.
4. INSULATOR MATERIAL: NYLON 46, UL94 HB, COLOR SEE PAGE 33.
5. CONTACT MATERIAL: COPPER ALLOY, TIN PLATED ALL OVER.
6. PCB PAD, TIN PLATED.

**5 WAY PCB BOARD LAYOUT**

THICKNESS 1.60 ± 0.15

NOTES:
- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

**PACKING DETAILS**

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<td>REEL PER BOX</td>
<td>TBC</td>
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**ssl - one piece card edge**

series 9159

5 way single part pcb strip connector

notes:
1. for more information refer to product spec 201-01-118.
2. dimensions are reference dimensions unless tolerated.
3. arrow to indicate contact position 1.
4. insulator material: nylon 46, ul94 hb, color see page 33.
5. contact material: copper alloy, tin plated all over.
6. pcb pad, tin plated.

5 way pcb board layout

thickness 1.60 ± 0.15

notes:
- 1)
- 2)
- 3)
- 4)
- 5)
- 6)

packing details

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<td>reel per box</td>
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</table>
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.

APPLICATONS
- 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 9175 00X
Prefix Series Number of Ways

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<th>Code</th>
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<td>Page 40</td>
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<table>
<thead>
<tr>
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<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>

<table>
<thead>
<tr>
<th>Insulator Color</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Black</td>
</tr>
<tr>
<td>01</td>
<td>White</td>
</tr>
</tbody>
</table>

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: PHOSPHOR BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
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.

PACKING DETAILS

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

AVX_book1_72withregmarks.pdf   39
AVX_book1_72withregmarks.pdf   39
11/4/11   08:40:00
11/4/11   08:40:00
26-28 AWG 3 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
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.

PACKING DETAILS

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

SMT PCB LAYOUT

PURE TIN PADS

PICK UP AREA 1.10 x 2.50mm

ALL TAILS TO BE WITHIN 0.00 COPLANARITY TOLERANCE

SSL - Discrete Wire IDC
Series 9175
SSL - Discrete Wire IDC
Series 9175

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

UNIVERSAL HANDLE

<table>
<thead>
<tr>
<th>Details</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>E38 A/F HEX BIT HOLDER</td>
<td>06 9175 7730 01 000</td>
</tr>
</tbody>
</table>

ALL METAL
HIGH PRODUCTION Metal

<table>
<thead>
<tr>
<th>Max Insulation Dia</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.3 1.00</td>
<td>06 9175 7017 01 000</td>
</tr>
</tbody>
</table>

MED PRODUCTION Metal/Plastic

<table>
<thead>
<tr>
<th>Max Insulation Dia</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 1.00</td>
<td>06 9175 7016 01 000</td>
</tr>
</tbody>
</table>

LOW PRODUCTION Plastic

<table>
<thead>
<tr>
<th>Max Insulation Dia</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 1.00</td>
<td>06 9175 7004 01 000</td>
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</tbody>
</table>

CLEARANCE AREA ON PCB FOR HAND TOOLING

2 WAY

<table>
<thead>
<tr>
<th>AREA TO BE KEPT CLEAR FOR TOOLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>6.00</td>
</tr>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>2.50</td>
</tr>
</tbody>
</table>

3 WAY

<table>
<thead>
<tr>
<th>AREA TO BE KEPT CLEAR FOR TOOLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00</td>
</tr>
<tr>
<td>8.50</td>
</tr>
<tr>
<td>7.50</td>
</tr>
<tr>
<td>2.50</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC
Series 9175

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

3 WAY TOOL
TOOL NUMBER 06-9175-7017-01-003
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.
SSL - Discrete Wire IDC
Series 9176

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 9176 series accepts 18 AWG to 24 AWG wires with an insulation diameter ranging from 1.1mm to 2.1mm. These dual contact connectors support a 10 amp current rating with two large SMT solder tails per wire to provide maximum stability on the PCB. Available in 1p-3p configuration, these connectors can be end stackable for higher pin counts. The 9176 series also comes with optional locking strain relief caps that act as the termination tool for severe vibration applications.

APPLICTIONS
• 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
• Optional thru and end caps lock in place to provide maximum strain relief
• High temperature insulator capable to 260ºC reflow soldering processes

ELECTRICAL
• Current Rating: 10 Amp / Contact
• Voltage Rating: 250 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

<table>
<thead>
<tr>
<th>Code</th>
<th>No of Ways</th>
<th>Details</th>
<th>Wire Gauge Size</th>
<th>Insulator Color</th>
<th>Plating Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9176</td>
<td>00X</td>
<td>00X</td>
<td>X</td>
<td>06</td>
</tr>
<tr>
<td>001</td>
<td>1</td>
<td>Page 44</td>
<td>16 Gauge Stranded</td>
<td>1.6-2.1 021</td>
<td>021</td>
</tr>
<tr>
<td>002</td>
<td>2</td>
<td>Page 49</td>
<td>20 Gauge Stranded</td>
<td>1.6-2.1 021</td>
<td>021</td>
</tr>
<tr>
<td>003</td>
<td>3</td>
<td>Page 48</td>
<td>22 Gauge Stranded</td>
<td>1.1-1.6 016</td>
<td>016</td>
</tr>
<tr>
<td>011</td>
<td>1</td>
<td>Page 45</td>
<td>25 Gauge Stranded</td>
<td>1.1-1.6 016</td>
<td>016</td>
</tr>
<tr>
<td>032</td>
<td>1</td>
<td>Page 46</td>
<td>24 Gauge Stranded</td>
<td>1.1-1.6 016</td>
<td>016</td>
</tr>
</tbody>
</table>

Certification: UL File #E320991
SSL - Discrete Wire IDC  
Series 9176

18-24 AWG 1 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
   COLOR REFER TO PAGE 43.
3. CONNECTOR DESIGNED TO ACCEPT BETWEEN 24 AND 18 GAUGE
   STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND
   APPLICATION NOTES 201-01-124.
6. FOR PCB SPACE RESTRICTED BY WIRE ASSEMBLY TOOLING REFER TO PAGE 47.
7. FOR HAND WIRE ASSEMBLY TOOLING REFER TO PAGE 49.

PACKING DETAILS

REEL QTY: 1000
LEADER: 480MM
TRAILER: 120MM

SMT PCB LAYOUT

PURE TIN PADS

<table>
<thead>
<tr>
<th>Code</th>
<th>Accepted Wire Gauge</th>
<th>A</th>
<th>Wire Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>18 Gauge Stranded</td>
<td>0.72</td>
<td>0.8-0.9</td>
</tr>
<tr>
<td>011</td>
<td>20 Gauge Stranded</td>
<td>0.60</td>
<td>0.8-2.1</td>
</tr>
<tr>
<td>022</td>
<td>22 Gauge Stranded</td>
<td>0.47</td>
<td>0.8-1.1-1.6</td>
</tr>
<tr>
<td>024</td>
<td>24 Gauge Stranded</td>
<td>0.37</td>
<td>0.8-1.1-1.6</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC
Series 9176

18-24 AWG 2 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
   COLOR REFER TO PAGE 43.
3. CONNECTOR DESIGNED TO ACCEPT BETWEEN 24 AND 18 GAUGE STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND APPLICATION
   NOTES 201-01-124.
6. FOR PCB SPACE RESTRICTED BY WIRE ASSEMBLY TOOLING REFER TO PAGE 47.
7. FOR HAND WIRE ASSEMBLY TOOLING REFER TO PAGE 49
8. FOR PRESS WIRE ASSEMBLY TOOLING REFER TO PAGE 50.
9. FOR ACCESSORY CAPS REFER TO PAGES 47 AND 48.

SMT PCB LAYOUT
PURE TIN PADS

Packing Details

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Reel Qty</td>
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</tr>
<tr>
<td>Leader</td>
<td>480MM</td>
</tr>
<tr>
<td>Trailer</td>
<td>1200MM</td>
</tr>
</tbody>
</table>

Anglia +44 (0)1945 47 47 47 www.anglia.com info@anglia.com
SSL - Discrete Wire IDC
Series 9176

18-24 AWG 3 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
   COLOR REFER TO PAGE 43.
3. CONNECTOR DESIGNED TO ACCEPT BETWEEN 24 AND 18 GAUGE STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND APPLICATION
   NOTES 201-01-124.
6. FOR PCB SPACE RESTRICTED BY WIRE ASSEMBLY TOOLING REFER TO PAGE 47.
7. FOR HAND WIRE ASSEMBLY TOOLING REFER TO PAGE 49.
8. FOR PRESS WIRE ASSEMBLY TOOLING REFER TO PAGE 50.
9. FOR ACCESSORY CAPS REFER TO PAGES 47 AND 48.

SMT PCB LAYOUT
PURE TIN PADS

PACKING DETAILS

REEL QTY 1000
LEADER 480MM
TRAILER 120MM
SSL - Discrete Wire IDC
Series 9176

60-9176-00X-0XX-X00
ACCESSORY CAP – THROUGH WIRE

NOTES:
1. CAP FOR IDC WIRE TO BOARD CONNECTION, 2 AND 3 WAY, THROUGH WIRE.
2. FOR USE WITH STANDARD 9176 IDC CONNECTORS, SEE PAGE 43 FOR THE CORRECT PART CODE TO MATCH WIRE.
3. CAP MATERIAL: GLASS FILLED NYLON 46, FOR COLORS SEE TABLE BELOW.
4. DIMENSIONS A, B AND TEXT, SEE TABLE BELOW.
5. CAPS DESIGNED TO ACCOMMODATE WIRE INSULATION DIAMETERS 1.1MM TO 1.6MM AND 1.6MM TO 2.1MM.
6. ALL DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
7. PACKED IN BAGS, 1000 PIECES PER BAG.

<table>
<thead>
<tr>
<th>Code</th>
<th>Slot A (AWG)</th>
<th>Diameter B</th>
<th>Text</th>
<th>Color X00</th>
</tr>
</thead>
<tbody>
<tr>
<td>016</td>
<td>1.60 (22-24)</td>
<td>1.00</td>
<td>9176 01.6</td>
<td>Black</td>
</tr>
<tr>
<td>021</td>
<td>2.10 (18-20)</td>
<td>1.50</td>
<td>9176 02.1</td>
<td>White</td>
</tr>
</tbody>
</table>
### SSL - Discrete Wire IDC
#### Series 9176

**60-9176-00X-0XX-X99**

**ACCESSORY CAP – WIRE STOP**

**NOTES:**
1. CAP FOR IDC WIRE TO BOARD CONNECTION, 2 AND 3 WAY, WITH WIRE STOP.
2. FOR USE WITH STANDARD 9176 IDC CONNECTORS, SEE PAGE 43 FOR THE CORRECT PART CODE TO MATCH WIRE.
3. CAP MATERIAL: GLASS FILLED NYLON 46, FOR COLORS SEE TABLE BELOW.
4. DIMENSIONS A, B AND TEXT, SEE TABLE BELOW.
5. CAPS DESIGNED TO ACCOMMODATE WIRE INSULATION DIAMETERS 1.1MM TO 1.6MM AND 1.6MM TO 2.1MM.
6. ALL DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
7. PACKED IN BAGS, 1000 PIECES PER BAG.

#### Code Slot A (AWG) Diameter B Text Color X99
<table>
<thead>
<tr>
<th>Code</th>
<th>Slot A (AWG)</th>
<th>Diameter B</th>
<th>Text</th>
<th>Color</th>
<th>X99</th>
</tr>
</thead>
<tbody>
<tr>
<td>016</td>
<td>1.60 (22-24)</td>
<td>1.00</td>
<td>9176</td>
<td>Black</td>
<td>099</td>
</tr>
<tr>
<td>021</td>
<td>2.10 (18-20)</td>
<td>1.50</td>
<td>9176</td>
<td>White</td>
<td>199</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC
Series 9176

HAND INSERTION TOOLING
FOR SINGLE 18/24 GAUGE WIRE

UNIVERSAL HANDLE

<table>
<thead>
<tr>
<th>Details</th>
<th>Tool Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.35 A/F HEX</td>
<td>06 9176 7017 01 000</td>
</tr>
<tr>
<td>BIT HOLDER</td>
<td>06 9176 7730 01 000</td>
</tr>
</tbody>
</table>

HIGH PRODUCTION
Metal

<table>
<thead>
<tr>
<th>Max Insulation Dia (AWG)</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.10 (18-20)</td>
<td>06 9176 7017 01 000</td>
</tr>
<tr>
<td>1.60 (22-24)</td>
<td>06 9176 7017 02 000</td>
</tr>
</tbody>
</table>

MED PRODUCTION
Metal/Plastic

<table>
<thead>
<tr>
<th>Max Insulation Dia (AWG)</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.10 (18-20)</td>
<td>06 9176 7016 01 000</td>
</tr>
<tr>
<td>1.60 (22-24)</td>
<td>06 9176 7016 02 000</td>
</tr>
</tbody>
</table>

CLEARANCE AREA ON PCB FOR HAND TOOLING

1 WAY

<table>
<thead>
<tr>
<th>AREA TO BE KEPT CLEAR FOR Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.00</td>
</tr>
<tr>
<td>4.00</td>
</tr>
<tr>
<td>3.00</td>
</tr>
<tr>
<td>1.00</td>
</tr>
</tbody>
</table>

2 WAY

<table>
<thead>
<tr>
<th>AREA TO BE KEPT CLEAR FOR Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.00</td>
</tr>
<tr>
<td>8.00</td>
</tr>
<tr>
<td>6.00</td>
</tr>
<tr>
<td>4.00</td>
</tr>
</tbody>
</table>

3 WAY

<table>
<thead>
<tr>
<th>AREA TO BE KEPT CLEAR FOR Tooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.00</td>
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<tr>
<td>12.00</td>
</tr>
<tr>
<td>10.00</td>
</tr>
<tr>
<td>8.00</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC
Series 9176

INSERTION TOOLING
REQUIRES HAND PRESS WITH FLAT ROCK PLATES

2 WAY
3 WAY

HIGH PRODUCTION
Metal

<table>
<thead>
<tr>
<th>No. of Ways</th>
<th>Max Insulation Dia (AWG)</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2.10 (18-20)</td>
<td>06 9176 7017 01 002</td>
</tr>
<tr>
<td></td>
<td>1.60 (22-24)</td>
<td>06 9176 7017 02 002</td>
</tr>
<tr>
<td>3</td>
<td>2.10 (18-20)</td>
<td>06 9176 7017 01 003</td>
</tr>
<tr>
<td></td>
<td>1.60 (22-24)</td>
<td>06 9176 7017 02 003</td>
</tr>
</tbody>
</table>

NOTES:
1. DIMENSIONS SHOWN ARE REFERENCE DIMENSIONS.
2. MAXIMUM COMPONENT HEIGHT 1.00MM IN THIS AREA.
3. MAXIMUM COMPONENT HEIGHT 6.00MM IN THIS AREA.
4. THE SAME RESTRICTIONS APPLY TO ALL WIRE INSULATION DIAMETERS
5. 2 AND 3 WAY TOOLS ONLY, FOR USE UNDER HAND PRESS WITH FLAT PLATES.
6. FOR HAND TOOLING REFER TO PAGE 47.
SSL - Discrete Wire IDC Contact & Cap

Series 9176-400

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. This new single contact was developed as a standalone component to enhance the application uses with the IDC technology. The simplicity of inserting a wire into an SMT contact with a small tool or optional retention / termination cap allows a wide range of devices to be connected to the PCB without soldering. In SSL applications specifically, these contacts 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 optional cap provides 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 single 9176-400 series contact and cap accepts 22 AWG to 24 AWG wires with an insulation diameter ranging from 1.0mm to 1.5mm. These dual beam contacts support a 6 amp current rating with a large SMT solder base to provide maximum stability on the PCB. The optional locking strain relief cap acts as the termination tool for severe vibration applications.

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 is supplied in T&R pockets for standard SMT placement
- IDC contact provides a gas-tight connection to the PCB for long term reliability
- Optional termination cap provides additional strain relief for severe environments
- Tested to automotive levels on shock, vibration and temperature cycling for reliability
- Reduced total applied cost versus solder or crimp processes
- Individual contacts can be located anywhere on the PCB based on specific application

ELECTRICAL
- Current Rating: 6 Amps/Contact
- Voltage Rating: Dependant on component proximity

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 – CONTACT OPTIONS

Prefix 70 = Contact

Prefix 60 = Cap

HOW TO ORDER – CAP OPTIONS

Code 4XX

Voltage Rating: Dependant on component proximity

Plating Option

Color Application

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Black</td>
<td>Industrial</td>
</tr>
<tr>
<td>100</td>
<td>White</td>
<td>Lighting</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC Contact & Cap
Series 9176-400

CONTACT DETAILS

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
3. CONTACT PLATING: PURE TIN.
4. CONNECTOR DESIGNED TO ACCEPT BETWEEN 22 AND 24 GAUGE STRANDED WIRE. SEE TABLE.
5. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
6. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND APPLICATION NOTES 201-01-124.
7. SMT PCB LAYOUT, REFER TO PAGE 53.
8. PACKING IN TAPE AND REEL, QUANTITY 2000 PER REEL.
9. WHEN REQUIRED, MATCHING CAP DETAILS ON DRAWING 60-9176-001-4XX-X06S.
10. ASSEMBLY TOOLING ON PAGE 54 FOR WIRE INTO CONTACT.

PACKING DETAILS

UNRECTED DIRECTION
SSL - Discrete Wire IDC Contact & Cap
Series 9176-400

22-24 AWG IDC WIRE TO BOARD CONNECTOR
SINGLE CONTACT

SMT PCB LAYOUT
PURE TIN PADS

ORIENTATION OF CONTACT ON PAD

ASSEMBLED/INSTALLED PRODUCTS

NOTES:
1. CONNECTOR CAN BE USED WITH CONTACT ONLY OR WITH OPTIONAL CAP.
2. OUTLINE OF CAP WHEN USED.
3. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND APPLICATION NOTES 201-01-124.
4. DIMENSIONS SHOWN ARE REFERENCED DIMENSIONS.
5. ASSEMBLY TOOLING FOR WIRE INTO CONTACT SEE PAGE 54.
SSL - Discrete Wire IDC Contact & Cap
Series 9176-400

ASSEMBLY TOOLING – CAP NOT USED
WIRE ONTO CONTACT

NOTES:
1. ASSEMBLY TOOLING FOR CONTACT ONLY, NO CAP USED.
2. MINIMUM AREA OF PCB TO BE KEPT CLEAR OF COMPONENTS, TACKS PERMISSIBLE.
3. REFER TO APPLICATION NOTE 201-01-124 FOR FURTHER INFORMATION.
4. INSERT CORRECT TOOL INTO HANDLE, MAGNETIC RETENTION.

METAL TOOL – HIGH VOLUME
06-9176-7021-01-000

PLASTIC TOOL – LOW/MEDIUM VOLUME
06-9176-7022-01-000

UNIVERSAL HANDLE
06 7000 7730 01 000
SSL - Discrete Wire IDC Contact & Cap
Series 9176-400

CAP DETAILS

NOTES:
1. CAP FOR IDC WIRE TO BOARD CONNECTION.
2. CAP MATERIAL: GLASS FILLED NYLON 46, COLOR SEE PAGE 51.
3. CAPS DESIGNED TO ACCOMMODATE WIRE INSULATION DIAMETERS 1.0MM TO 1.5MM.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106, APPLICATION NOTES 201-01-124.
6. PACKING IN BAGS, QUANTITY 2000 PER BAG.
7. FOR INSTALLATION DETAILS REFER TO DRAWING 70-9176-001-4XX-006S.
SSL - Discrete Wire IDC Contact & Cap
Series 9176-500

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. This new single contact was developed as a standalone component to enhance the application uses with the IDC technology. The simplicity of inserting a wire into an SMT contact with a small tool or optional retention / termination cap allows a wide range of devices to be connected to the PCB without soldering. In SSL applications specifically, these contacts 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 optional cap provides 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 single 9176 series contact and cap accepts 18 AWG to 24 AWG wires with an insulation diameter ranging from 1.1mm to 2.1mm. These dual beam contacts support a 10 amp current rating with a large SMT solder base to provide maximum stability on the PCB. The optional locking strain relief cap acts as the termination tool for severe vibration applications.

### 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 is supplied in T&R pockets for standard SMT placement
- Optional termination cap provides a gas-tight connection to the PCB for long term reliability
- Optional termination cap provides additional strain relief for severe environments
- Tested to automotive levels on shock, vibration and temperature cycling for reliability
- Reduced total applied cost versus solder or crimp processes
- Individual contacts can be located anywhere on the PCB based on specific application

### ELECTRICAL
- Current Rating: 10 Amps/Contact
- Voltage Rating: Dependant on component proximity

### 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 – CONTACT OPTIONS

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Series</th>
<th>Number of Ways</th>
<th>Wire Gauge Size</th>
<th>Plating Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>9176</td>
<td>001 5XX</td>
<td>001 1001</td>
<td></td>
</tr>
</tbody>
</table>

### HOW TO ORDER – CAP OPTIONS

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Series</th>
<th>Number of Ways</th>
<th>Wire Gauge Size</th>
<th>Insulator Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>9176</td>
<td>001 5XX</td>
<td>001 1001</td>
<td>0 Black Industrial</td>
</tr>
</tbody>
</table>

AVX_book1_72withregmarks.pdf   56
AVX_book1_72withregmarks.pdf   56
11/4/11   08:40:04
SSL - Discrete Wire IDC Contact & Cap
Series 9176-500

CONTACT DETAILS

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHORE BRONZE.
3. CONTACT PLATING: PURE TIN.
4. CONNECTOR DESIGNED TO ACCEPT BETWEEN 18 AND 24 GAUGE STRANDED WIRE. SEE TABLE.
5. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
6. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND APPLICATION NOTES 201-01-124.
7. SMT PCB LAYOUT, REFER TO PAGE 58.
8. PACKING IN TAPE AND REEL, QUANTITY 1000 PER REEL.
9. WHEN REQUIRED, MATCHING CAP DETAILS ON DRAWING 60-9176-001-SXX-X00S.
10. ASSEMBLY TOOLING ON PAGE 59 (WITH CAP AND WITHOUT CAP).

PACKING DETAILS

REEL QTY 1000
LEADER 480MM
TRAILER 120MM
SSL - Discrete Wire IDC Contact & Cap
Series 9176-500

18-24 AWG IDC WIRE TO BOARD CONNECTOR
SINGLE CONTACT

SMT PCB LAYOUT
PURE TIN PADS

ASSEMBLED/INSTALLED PRODUCTS

NOTES:
1. CONNECTOR CAN BE USED WITH CONTACT ONLY OR WITH OPTIONAL CAP.
2. OUTLINE OF CAP WHEN USED.
3. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106 AND 201-01-124.
4. DIMENSIONS SHOWN ARE REFERENCED DIMENSIONS.
5. ASSEMBLY TOOLING ON PAGE 59 (WITH CAP AND WITHOUT CAP).
SSL - Discrete Wire IDC Contact & Cap
Series 9176-500

ASSEMBLY TOOLING – CAP USED

NOTES:
1. ASSEMBLY TOOLING FOR CAP
2. AREA OF PCB TO BE KEPT CLEAR OF COMPONENTS,
   TACKS PERMISSIBLE.
3. WIRE AND CAP INSERTED IN ONE OPERATION.
4. REFER TO APPLICATION NOTE 201-01-124 FOR FURTHER
   INFORMATION.
5. REFER BELOW WHEN CONTACT USED WITHOUT CAP.

ASSEMBLY TOOLING – CAP NOT USED

NOTES:
1. ASSEMBLY TOOLING FOR CONTACT ONLY, NO CAP USED.
2. MINIMUM AREA OF PCB TO BE KEPT CLEAR OF
   COMPONENTS, TRACK PERMISSIBLE.
3. REFER TO TABLE FOR CORRECT TOOL/WIRE COMBINATION.
4. REFER TO APPLICATION NOTE 201-01-124 FOR FURTHER
   INFORMATION.

<table>
<thead>
<tr>
<th>Wire Guage</th>
<th>Wire Insulation ø</th>
<th>Metal Tool High Volume</th>
<th>Plastic Tool Small to Medium Volume</th>
<th>Handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-24 AWG</td>
<td>1.10 to 1.50</td>
<td>06-9176-7019-02-000</td>
<td>06-9176-7020-02-000</td>
<td>06-7000-7730-01-000</td>
</tr>
<tr>
<td>18-20 AWG</td>
<td>1.05 to 1.20</td>
<td>06-9176-7019-01-000</td>
<td>06-9176-7020-01-000</td>
<td>06-7000-7730-01-000</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC Contact & Cap  
Series 9176-500

NOTES:
1. CAP FOR IDC WIRE TO BOARD CONNECTION.
2. CAP MATERIAL: GLASS FILLED NYLON 46, COLOR SEE PAGE 56.
3. CAPS DESIGNED TO ACCOMMODATE WIRE INSULATION DIAMETERS 1.1MM TO 2.1MM.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-106, APPLICATION NOTES 201-01-124.
6. PACKING IN BAGS, QUANTITY 1000 PER BAG.
7. FOR INSTALLATION DETAILS REFER TO DRAWING 70-9176-001-XX-006S.

<table>
<thead>
<tr>
<th>Code</th>
<th>Insulator Diameter (AWG)</th>
<th>B</th>
<th>Text C</th>
</tr>
</thead>
<tbody>
<tr>
<td>516</td>
<td>1.1 to 1.6 (22-24)</td>
<td>1.00</td>
<td>Ø 1.6</td>
</tr>
<tr>
<td>521</td>
<td>1.6 to 2.1 (18-20)</td>
<td>1.50</td>
<td>Ø 2.1</td>
</tr>
</tbody>
</table>
SSL - Discrete Wire IDC

Series 9177

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 9177 series accepts 14 AWG to 20 AWG wires with an insulation diameter ranging from 2.75mm to 4.25mm. These dual contact connectors support a 15 amp current rating with two large SMT solder tails per wire to provide maximum stability on the PCB. Available in 1p-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°C reflow soldering processes

### ELECTRICAL
- Current Rating: 15 Amp / Contact
- Voltage Rating: 600 VAC

### HOW TO ORDER

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Series</th>
<th>No of Ways</th>
<th>Code</th>
<th>Wire Gauge</th>
<th>Wire Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9177</td>
<td>00X</td>
<td>001</td>
<td>14 AWG</td>
<td>0.425</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>012</td>
<td>16 AWG</td>
<td>0.350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>022</td>
<td>18 AWG</td>
<td>0.350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>033</td>
<td>20 AWG</td>
<td>0.275</td>
</tr>
</tbody>
</table>

Certification: UL File #E320991
SSL - Discrete Wire IDC
Series 9177

14-20 AWG 1 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
   INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
   COLOR REFER TO PAGE 61.
3. CONNECTOR DESIGNED TO ACCEPT BETWEEN 14 AND 20 GAUGE
   STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELOO SPEC 201-01-109.
6. FOR PCB SPACE RESTRICTED BY ASSEMBLY TOOLING REFER TO PAGE 65.

SMT PCB LAYOUT
PURE TIN PADS

<table>
<thead>
<tr>
<th>Code</th>
<th>Accepted Wire Gauge</th>
<th>A Wire Insulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>14 Gauge Stranded</td>
<td>Ø 4.25 max 4.25</td>
</tr>
<tr>
<td>012</td>
<td>16 Gauge Stranded</td>
<td>Ø 3.50 max 3.50</td>
</tr>
<tr>
<td>022</td>
<td>18 Gauge Stranded</td>
<td>Ø 3.50 max 3.50</td>
</tr>
<tr>
<td>033</td>
<td>20 Gauge Stranded</td>
<td>Ø 2.75 max 2.75</td>
</tr>
</tbody>
</table>

PACKING DETAILS

REEL CNT  400
LEADER  500MM
TRAILER  400MM
REEL/BOX  4
PACK CNT  1600
SSL - Discrete Wire IDC
Series 9177

14-20 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 61.
3. CONNECTOR DESIGNED TO ACCEPT BETWEEN 14 AND 20 GAUGE
   STRANDED WIRE.
4. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
5. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-109.
6. FOR PCB SPACE RESTRICTED BY ASSEMBLY TOOLING REFER TO PAGE 65.

PACKING DETAILS

<table>
<thead>
<tr>
<th>REEL QTY</th>
<th>LEADER</th>
<th>TRAILER</th>
<th>REEL/BOX</th>
<th>PACK QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>500MM</td>
<td>400MM</td>
<td>4</td>
<td>1600</td>
</tr>
</tbody>
</table>

SMT PCB LAYOUT

PURE TIN PADS

Code | Accepted Wire Gauge | Wire Insulation | A | B |
-----|---------------------|-----------------|---|---|
001  | 14 Gauge Stranded   | Ø 4.25 max      | 4.25 |
012  | 16 Gauge Stranded   | Ø 3.50 max      | 3.50 |
022  | 18 Gauge Stranded   | Ø 3.50 max      | 3.50 |
033  | 20 Gauge Stranded   | Ø 2.75 max      | 2.75 |
SSL - Discrete Wire IDC
Series 9177

14-20 AWG 3 WAY IDC CONNECTOR

NOTES:
1. CONNECTOR FOR IDC WIRE TO BOARD CONNECTION.
2. CONTACT MATERIAL: PHOSPHOR BRONZE.
3. INSULATION MATERIAL: HIGH TEMPERATURE NYLON 46.
4. COLOR REFER TO PAGE 61.
5. CONNECTOR DESIGNED TO ACCEPT BETWEEN 14 AND 20 GAUGE STRANDED WIRE.
6. ALL DIMENSIONS FOR REFERENCE UNLESS OTHERWISE STATED.
7. FOR FULL PRODUCT SPECIFICATION REFER TO ELCO SPEC 201-01-109.
8. FOR PCB SPACE RESTRICTED BY ASSEMBLY TOOLING REFER TO PAGE 65.

SMT PCB LAYOUT

PURE TIN PADS

<table>
<thead>
<tr>
<th>Code</th>
<th>Accepted Wire Gauge</th>
<th>A</th>
<th>Wire Insulation</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>14 Gauge Stranded</td>
<td>1.10</td>
<td>1.425 max</td>
<td>4.25</td>
</tr>
<tr>
<td>012</td>
<td>16 Gauge Stranded</td>
<td>0.82</td>
<td>0.350 max</td>
<td>3.50</td>
</tr>
<tr>
<td>022</td>
<td>18 Gauge Stranded</td>
<td>0.70</td>
<td>0.350 max</td>
<td>3.50</td>
</tr>
<tr>
<td>033</td>
<td>20 Gauge Stranded</td>
<td>0.60</td>
<td>0.275 max</td>
<td>2.75</td>
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</table>

PACKING DETAILS

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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<tbody>
<tr>
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<tr>
<td>LEADER</td>
<td>500MM</td>
</tr>
<tr>
<td>TRAILER</td>
<td>400MM</td>
</tr>
<tr>
<td>REEL BOX</td>
<td>4</td>
</tr>
<tr>
<td>PACK QTY</td>
<td>1600</td>
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</tbody>
</table>
SSL - Discrete Wire IDC
Series 9177

INSERTION TOOLING – REQUIRES HAND PRESS WITH FLAT ROCK PLATES

1 WAY

2 WAY

3 WAY

HIGH PRODUCTION

<table>
<thead>
<tr>
<th>No. of Ways</th>
<th>Max Insulation Dia (AWG)</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.25 (14)</td>
<td>06 9177 7017 01 001</td>
</tr>
<tr>
<td>2</td>
<td>2.75 (20)</td>
<td>06 9177 7017 03 001</td>
</tr>
<tr>
<td>3</td>
<td>2.75 (20)</td>
<td>06 9177 7017 03 002</td>
</tr>
</tbody>
</table>

MED PRODUCTION

<table>
<thead>
<tr>
<th>No. of Ways</th>
<th>Max Insulation Dia (AWG)</th>
<th>Tool Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.25 (14)</td>
<td>06 9177 7017 01 002</td>
</tr>
<tr>
<td>2</td>
<td>2.75 (20)</td>
<td>06 9177 7017 03 002</td>
</tr>
<tr>
<td>3</td>
<td>2.75 (20)</td>
<td>06 9177 7017 03 003</td>
</tr>
</tbody>
</table>

The assembly tooling restricts the available space/component heights on the PCB. For details see below.

NOTES:
1. ALL DIMENSIONS FOR REFERENCE DIMENSIONS.
2. MAXIMUM COMPONENT HEIGHT 0.80MM IN THIS AREA.
3. MAXIMUM COMPONENT HEIGHT 11.00 MM IN THIS AREA.
4. THE SAME RESTRICTIONS APPLY TO ALL WIRE INSULATION DIAMETERS.

INSERTION TOOLING – PCB RESTRICTED AREAS FOR ASSEMBLY TOOLING

1 WAY

2 WAY

3 WAY

The assembly tooling restricts the available space/component heights on the PCB. For details see below.

NOTES:
1. ALL DIMENSIONS FOR REFERENCE DIMENSIONS.
2. MAXIMUM COMPONENT HEIGHT 0.80MM IN THIS AREA.
3. MAXIMUM COMPONENT HEIGHT 11.00 MM IN THIS AREA.
4. THE SAME RESTRICTIONS APPLY TO ALL WIRE INSULATION DIAMETERS.
The new 9276 series connector provides a quick and reliable wire-to-board termination in a sleek 2.5mm pitch SMT package for a broad range of industrial and commercial markets. With almost every product on the market today having to deal with a small number of discrete wires to connect components to a board, the 9276 series connectors meet this challenge by simply stripping the wire and inserting them into the connector. This makes the connector very termination friendly within the factory as well as in the field by electrical installers. Developed for harsh industrial and Solid State Lighting (SSL) applications, the connector was designed with a high spring force Beryllium Copper upper spring contact to accept a wide range (18-24 AWG solid or stranded) of wire to meet multiple applications with a single connector. By incorporating a dual-contact design we were able to maximize current rating (6 Amps) and minimize PCB space. For example, the 4p connector has a footprint of 90 sq-mm while competing products are 160 sq-mm. The dual-contact design also provides two solder points for each wire eliminating the need for external anchor tabs. AVX provides a small insertion / extraction tool which will allow the wires to easily be replaced up to 5 times.

### APPLICATIONS
- Connecting discrete wire components directly to the PCB
- Bring power and signals onto a PCB
- Daisy chaining PCB’s together to create a continuous string of boards
- Application notes; refer to 201-01-127

### FEATURES AND BENEFITS
- Simple strip, insert and removal design
- SMT RoHS termination to the PCB with minimal footprint
- Accepts 18-24AWG Solid and Stranded wires
- Expanded size offering to maximize application potential; 1, 2, 3, 4, 6 & 8 positions
- High spring force top contact provides a lance type retention to capture and retain the wire
- Available in standard white and optional black color

### ELECTRICAL
- Current Rating: 6 Amps / Contact
- Voltage Rating: 250v AC

### ENVIRONMENTAL
- Operating Temperature: -40ºC to +125ºC

### MECHANICAL
- Insulator Material: Glass-Filled Nylon 46; UL94V0
- Contact Material: Beryllium Copper / Phosphor Bronze
- Plating: Tin over Nickel
- Replacibility: 5 Cycles

### HOW TO ORDER

<table>
<thead>
<tr>
<th>Code</th>
<th>Wire Max Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>2 18-24 AWG</td>
</tr>
<tr>
<td>002</td>
<td>3 1.20mm</td>
</tr>
<tr>
<td>003</td>
<td>4 2.10mm</td>
</tr>
<tr>
<td>004</td>
<td>5 Diameter</td>
</tr>
<tr>
<td>005</td>
<td>6 Diameter</td>
</tr>
<tr>
<td>006</td>
<td>8 Diameter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>Black</td>
<td>Industrial</td>
</tr>
<tr>
<td>002</td>
<td>White</td>
<td>Lighting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Color</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
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<td>Industrial</td>
</tr>
<tr>
<td>002</td>
<td>White</td>
<td>Lighting</td>
</tr>
</tbody>
</table>
Discrete Wire-to-Board; Poke-Home
Series 9276

1 WAY WIRE TO BOARD CONNECTOR

SECTION ON A-A

SECTION ON A-A WITH WIRE

NOTES:
1. 9276 ONE WAY CONNECTOR, REFER TO ELCO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2. INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0. COLOR REFER TO PAGE 66
3. CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4. OUTLINE OF CONNECTOR.
5. WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73.
6. FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB.
7. PACKING TAPE AND REEL, QUANTITY 1000 PER REEL.

1 WAY PCB BOARD LAYOUT

PACKING DETAILS
NOTES:
1. 9276 TWO WAY CONNECTOR, REFER TO ELOO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2. INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 66
3. CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4. OUTLINE OF CONNECTOR.
5. WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73.
6. FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB.
7. PACKING TAPE AND REEL, QUANTITY 1000 PER REEL.

2 WAY PCB BOARD LAYOUT
Discrete Wire-to-Board; Poke-Home
Series 9276

3 WAY WIRE TO BOARD CONNECTOR

SECTION ON A-A

NOTES:
1. 9276 THREE WAY CONNECTOR, REFER TO ELCO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2. INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 86
3. CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4. OUTLINE OF CONNECTOR.
5. WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73.
6. FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB.
7. PACKING TAPE AND REEL, QUANTITY 1000 PER REEL.

3 WAY PCB BOARD LAYOUT

PACKING DETAILS

anglia +44 (0)1945 47 47 47 www.anglia.com info@anglia.com
NOTES:
1. 9276 FOUR WAY CONNECTOR, REFER TO ELCO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2. INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 66
3. CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4. OUTLINE OF CONNECTOR.
5. WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73.
6. FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB.
7. PACKING TAPE AND REEL, QUANTITY 1000 PER REEL.
Discrete Wire-to-Board; Poke-Home
Series 9276

6 WAY WIRE TO BOARD CONNECTOR

SECTION ON A-A

SECTION ON A-A WITH WIRE

NOTES:
1. 9276 SIX WAY CONNECTOR, REFER TO ELCO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2. INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 66
3. CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4. OUTLINE OF CONNECTOR
5. WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73.
6. FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB.
7. PACKING TAPE AND REEL, QUANTITY 1000 PER REEL.

6 WAY PCB BOARD LAYOUT

PACKING DETAILS
Discrete Wire-to-Board; Poke-Home
Series 9276

8 WAY WIRE TO BOARD CONNECTOR

NOTES:
1.  9276 EIGHT WAY CONNECTOR, REFER TO ELCO SPECIFICATION 201-01-125 AND APPLICATION NOTES 201-01-127 FOR FURTHER DETAILS
2.  INSULATOR MATERIAL: NYLON 46, GLASS FILLED, UL94 V-0, COLOR REFER TO PAGE 66
3.  CONTACT MATERIAL: COPPER ALLOY, 0.20MM THICK, TIN PLATED.
4.  OUTLINE OF CONNECTOR
5.  WIRE ASSEMBLY / EXTRACTION, REFER TO PAGE 73
6.  FRONT FACE OF CONNECTOR CAN BE IN LINE WITH EDGE OF PCB
7.  PACKING TAPE AND REEL, QUANTITY 1000 PER REEL

8 WAY PCB BOARD LAYOUT

PACKING DETAILS

UNREELLED DIRECTION
Discrete Wire-to-Board; Poke-Home
Series 9276

WIRE ASSEMBLY
FOR FURTHER DETAILS REFER TO APPLICATION NOTES 201-01-127

TRIM INSULATION.
DO NOT CRUSH CENTER OF WIRE.
STRANDED WIRES TWISTED TOGETHER BEFORE INSERTION.
CHECK ALL STANDS OF WIRE ARE CORRECTLY ALIGNED
AFTER THE INSULATION IS REMOVED.

PUSH WIRE INTO HOLE IN FRONT OF CONNECTOR
DO NOT BEND CONNECTOR
CONTINUED TO PUSH WIRE UNTIL STOP IS REACHED.

WIRE EXTRACTION

PUSH BLADE (NOT SHARP) INTO SLOT ABOVE WIRE.
WHEN WIRE IS FREE, PULL TO EXTRACT.
About Anglia

Anglia is the UK’s leading independent authorised distributor of semiconductors, optoelectronics, interconnect, and passive and electromechanical components. A signatory of the ADS SC21 programme, the company holds AS9120, ISO9001 & ISO14001 accreditations and EEC-CECC qualification.

Technically adept, with an experienced team of staff, Anglia supports OEM and EMS companies in every sector of electronics manufacturing. Suppliers include some of the world’s leading electronics component brands, complemented by many smaller companies with leadership in their chosen technologies.

Anglia stocks over 700 million components from 500,000 product lines in the UK ready for same-day dispatch. It aims to minimise logistics and reduce customer transaction costs through services that include KAN-BAN, EDI and customer-dedicated inventory culminating in accurate on-time delivery.

Anglia is driven by an ethic of ever-improving customer understanding and, as a privately owned business, aims to provide a fast, consistent and highly responsive service.

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