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.

### 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: -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>9159 Series</th>
<th>00X Number of Ways</th>
<th>01 2 Part PCB Strip Connector Pitch 01 = 3mm</th>
<th>X Color/Approval</th>
<th>16 Plating Option</th>
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<tr>
<td>11</td>
<td></td>
<td>002 2 Page 10</td>
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<td></td>
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<td>003 3 Page 11</td>
<td></td>
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<td>005 5 Page 13</td>
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Optional Cover
See page 15 for ordering code

Optional Latch
See page 16 for ordering code

NOTES: Connectors are supplied with cable ties (see page 17). Covers/Latches are sold separately (see pages 15-16 for ordering codes). Certification: UL File #E90723
Solder Cup Plug: WTB
11-9159

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.
Solder Cup Plug: WTB

11-9159

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

MARKER IN LINE WITH POSITION 1
Solder Cup Plug: WTB

11-9159

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
Solder Cup Plug: WTB

11-9159

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
Solder Cup Plug: WTB
11-9159

PLUG WIRED
6 WAY 2 PART 9159 LIGHTING CONNECTOR

PACKING DETAILS
CABLE TIES SUPPLIED WITH EACH REEL

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.
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. SEE PAGE 9. COLOR OPTIONS X=1 FOR WHITE, X=0 FOR BLACK.
3. CONNECTOR ASSEMBLY USING THESE COVERS REMAIN UL APPROVED.
4. PACKED IN BAGS, 1400 PIECES PER BAG.
5. MAXIMUM OUTER WIRE SIZE, 1.6MM DIAMETER INSULATION.
6. MATERIAL: GLASS FILLED NYLON 46. COLOR SEE PAGE 9.
7. COLOR OPTIONS SEE PAGE 9. (ALSO NOTE 2).
8. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
9. TO BE ASSEMBLED BEFORE CABLE TIE.
10. REFER TO APPLICATIONS NOTES 201-01-123 FOR FURTHER DETAILS.
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. OPTION COMPONENT, ORDER SEPARATELY. SEE PAGE 9. COLOR OPTIONS X=1 FOR WHITE, X=0 FOR BLACK.
   CONNECTOR ASSEMBLY USING THESE LATCHES REMAINS UL APPROVED.
3. PACKED IN BAGS, 1400 PIECES PER BAG.
4. MATERIAL: GLASS FILLED NYLON 46. COLOR SEE PAGE 9 (ALSO NOTE 2).
5. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
6. TO BE ASSEMBLED BEFORE COVER.
7. REFER TO APPLICATIONS NOTES 201-01-123 FOR FURTHER DETAILS.
Solder Cup Plug: WTB
11-9159

PLUG WIRED ACCESSORY ORDERING CODES

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<th>Connector Assembly</th>
<th>Optional Components</th>
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<td>60-9159-3302-0X-000</td>
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<td>11-9159-006-101-X16</td>
<td>60-9159-3306-0X-000</td>
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"X" FOR COLOR OPTION SEE TABLE ON PAGE 9.
WHEN USING OPTIONS 8 AND 9 UL CONNECTOR OPTIONS ARE UL APPROVED.

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 ASSEMBLY OPTIONS

PLUG ASSEMBLY

PLUG ASSEMBLY WITH COVER

PLUG ASSEMBLY WITH COVER AND LATCH