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.

APPLIED USES
- 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>Code</th>
<th>Number of Ways</th>
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<tbody>
<tr>
<td>002</td>
<td>2</td>
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<td>003</td>
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RoHS COMPLIANT

Certification: UL File #E90723
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 1.
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
Top Load Socket: BTB

22-9159

SOCKET TOP LOADING
3 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
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3 WAY PCB BOARD LAYOUT

PACKING DETAILS

UNREELD DIRECTION

UNREELD DIRECTION
SOCKET TOP LOADING
4 WAY 2 PART PCB STRIP CONNECTOR

NOTES:
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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.

4 WAY PCB BOARD LAYOUT

PACKING DETAILS
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.
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
Top Load Socket: BTB

22-9159

SOCKET TOP LOADING
6 WAY 2 PART PCB STRIP CONNECTOR

MARKER IN LINE WITH POSITION 1

NOTES:
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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

UNREELLED DIRECTION

UNREELLED DIRECTION

NOTE 8
NOTE 1

POSITION 1

24.00 NOTE 8
20.00 NOTE 6
19.87

5 SPACES
@ 3.00 x 15.00

7.50 NOTE 8

1.60 x 1.50

1.60 x 1.70

2 PADS

6 PADS

AVX
Top Load Socket: BTB

22-9159

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