### **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 3 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
- 3 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: 3 Amps / Contact

Voltage Rating: 125 VAC

#### **ENVIRONMENTAL**

• Operating Temperature: -40°C to +125°C

#### **MECHANICAL**

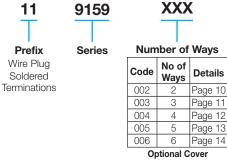
Insulator Material: Nylon: VL94VO

Contact Material: BeCu / Phos Bronze

• Plating: Gold / Tin over Nickel

• Durability: 10 Cycles

### **HOW TO ORDER**

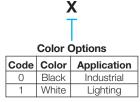


See page 15 for ordering code

Optional Latch

See page 16 for ordering code

1 01 T Connector PCB Strip Connector Pitch 01 = 3mm







NOTES: Connectors are supplied with cable ties (see page 17).

Covers/Latches are sold separately (see pages 15-16 for ordering codes).

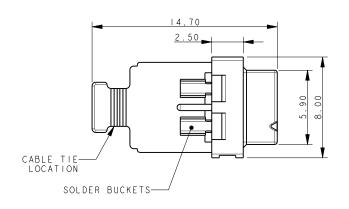
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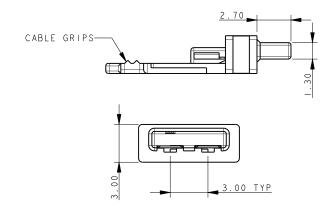


### Series 9159



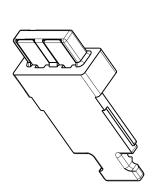
# PLUG WIRED 2 WAY 2 PART 9159 LIGHTING CONNECTOR

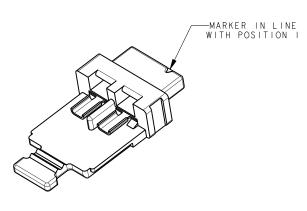


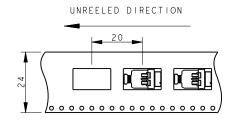


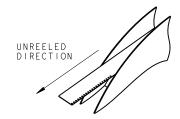
#### NOTES:

- 1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
- 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.





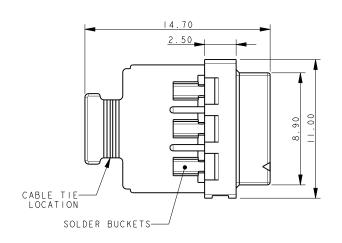


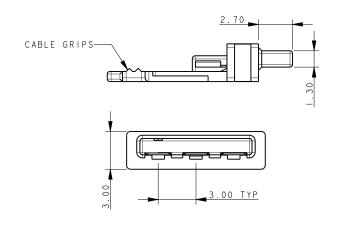






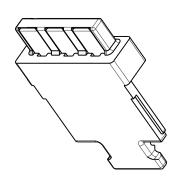
# PLUG WIRED 3 WAY 2 PART 9159 LIGHTING CONNECTOR

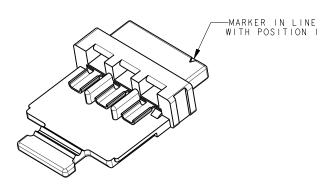


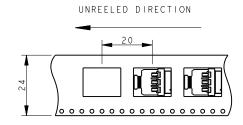


#### **NOTES**

- 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.





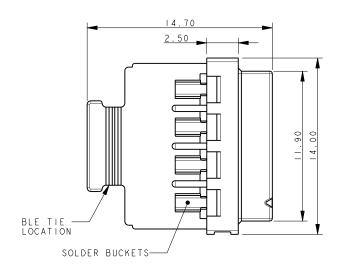


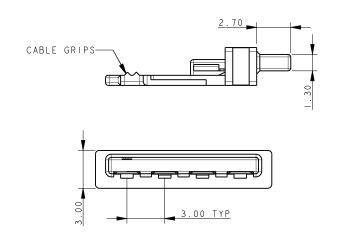






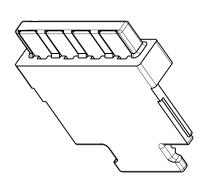
# PLUG WIRED 4 WAY 2 PART 9159 LIGHTING CONNECTOR

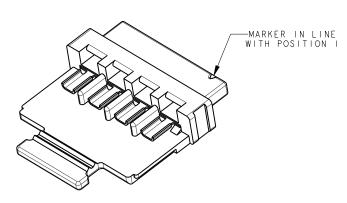


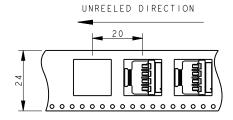


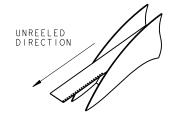
#### NOTES:

- 1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
- 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.





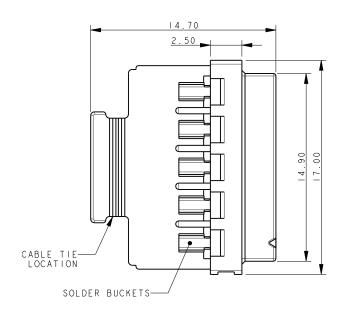


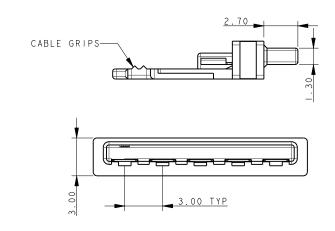






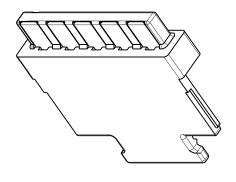
# PLUG WIRED 5 WAY 2 PART 9159 LIGHTING CONNECTOR

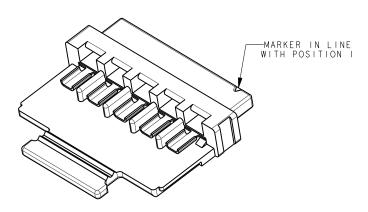


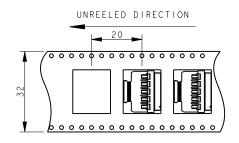


#### NOTES:

- 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.





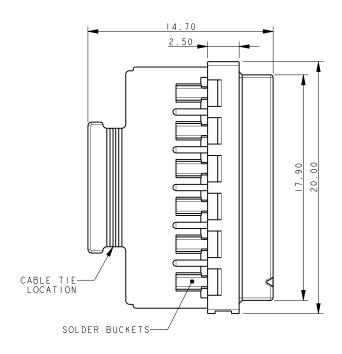


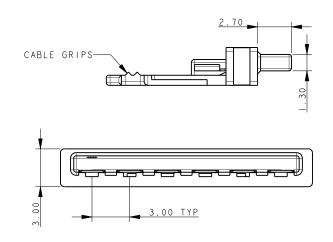






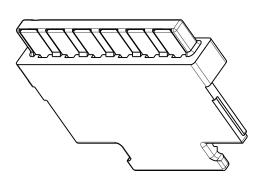
# PLUG WIRED 6 WAY 2 PART 9159 LIGHTING CONNECTOR

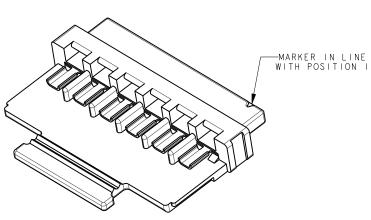


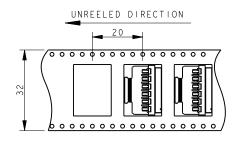


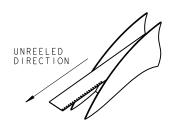
#### NOTES:

- 1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
- 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.











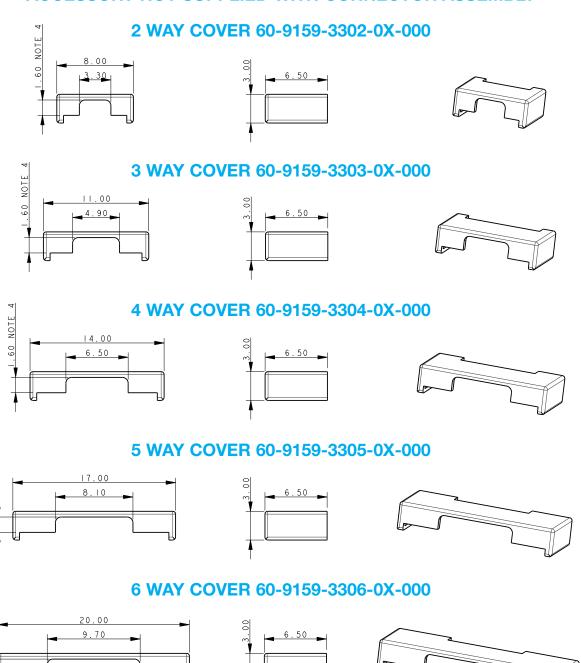
NOTE

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60 NOTE



### PLUG WIRED COVERS ACCESSORY NOT SUPPLIED WITH CONNECTOR ASSEMBLY



#### 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, 1.6MM DIAMETER INSULATION.
- 5. MATERIAL: GLASS FILLED NYLON 46. COLOR REFER TO PAGE 9.
- ${\it 6. \,\, COLOR \,\, OPTIONS \,\, SEE \,\, PAGE \,\, 9.}$
- 7. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
- 8. TO BE ASSEMBLED BEFORE CABLE TIE.

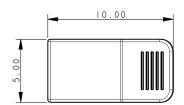


### Series 9159



### PLUG WIRED LATCHES ACCESSORY NOT SUPPLIED WITH CONNECTOR ASSEMBLY

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

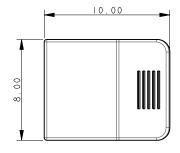






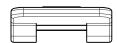


### LATCH 60-9159-3403-0X-000 USED ON 3 AND 5 WAY ASSEMBLIES









#### 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.





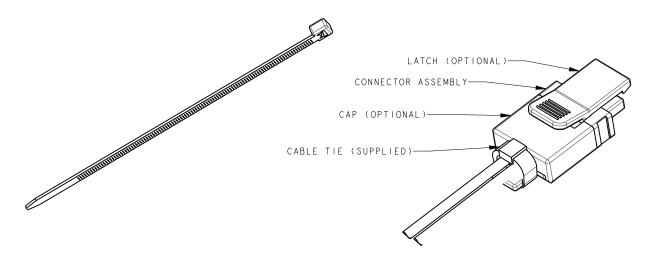
### **PLUG WIRED ACCESSORY ORDERING CODES**

<b>Connector Assembly</b>	Optional Components	
Part Number	Cover (see page 7)	Latch (see page 8)
11-9159-002-101-X16	60-9159-3302-0X-000	60-9159-3402-0X-000
11-9159-003-101-X16	60-9159-3303-0X-000	60-9159-3403-0X-000
11-9159-004-101-X16	60-9159-3304-0X-000	60-9159-3402-0X-000
11-9159-005-101-X16	60-9159-3305-0X-000	60-9159-3403-0X-000
11-9159-006-101-X16	60-9159-3306-0X-000	60-9159-3402-0X-000

<sup>&</sup>quot;X" For color option refer to table on page 1.

#### **CABLE TIE**

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



### **PLUG WIRED 3 ASSEMBLY OPTIONS**

