



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**

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Prefix	Series	Number of Ways		2 Part	Connector	Color/Approval			Plating Option		
Wire Plug		Code	No of	Detaile	PCB Strip Connector	<b>Pitch</b> 01 = 3mm	Code	Color	Approval	Code	Contact
Soldered		Coue	Ways	Details	Connector	01 = 311111	0	Black	Special Order - Non-UL	16	Gold in Contact Area
Terminations		002		Page 10			1	White	Special Order - Non-UL		Tin on Solder Tail
		003	3	Page 11			8	Black	Special Order - UL Approved		
		004	4	Page 12			9	White	Standard - UL Approved		
		005	5	Page 13							
		006	6	Page 14							
		O	otional C	over							
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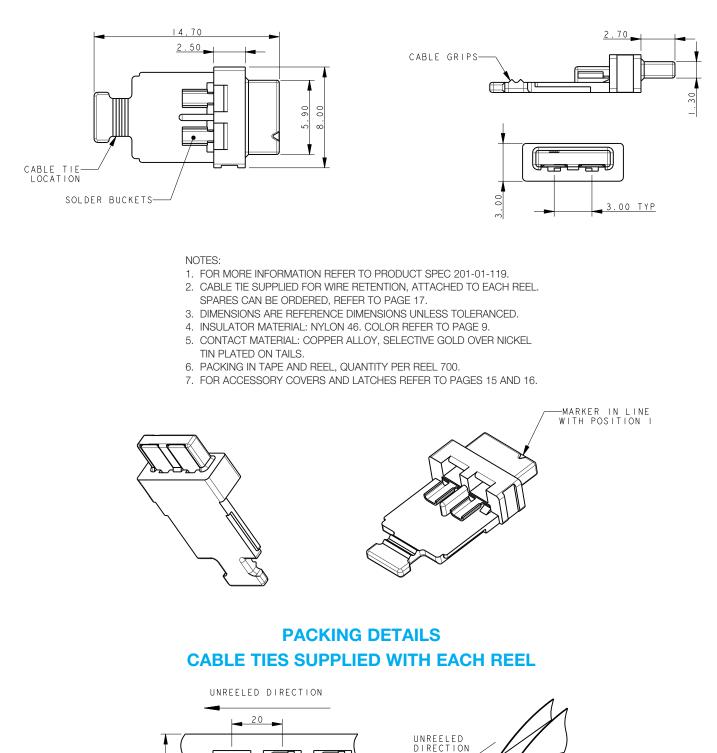
NOTES: Connectors are supplied with cable ties (see page 17). Covers/Latches are sold separately (see pages 15-16 for ordering codes).

Certification: UL File #E90723





#### PLUG WIRED 2 WAY 2 PART 9159 LIGHTING CONNECTOR



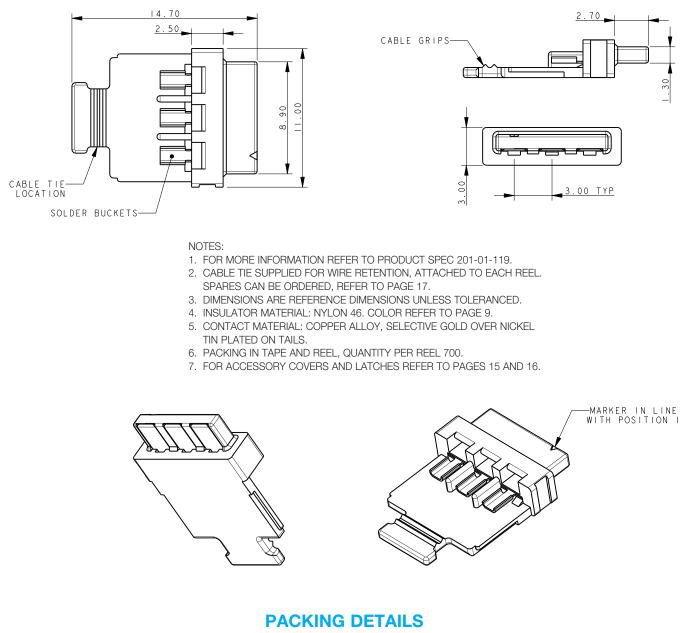
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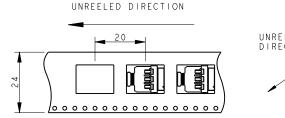
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### PLUG WIRED 3 WAY 2 PART 9159 LIGHTING CONNECTOR



#### CABLE TIES SUPPLIED WITH EACH REEL

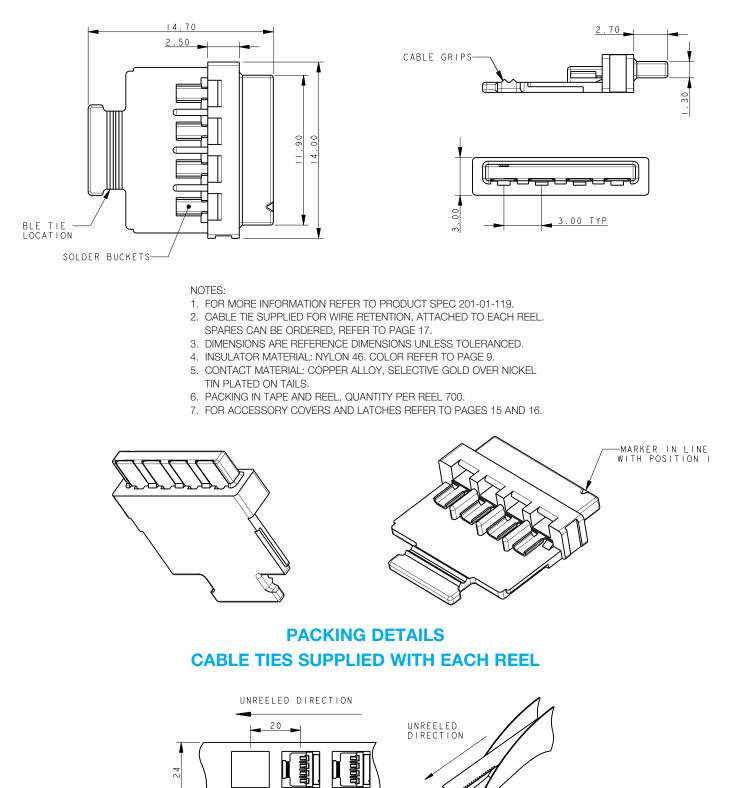








### PLUG WIRED 4 WAY 2 PART 9159 LIGHTING CONNECTOR

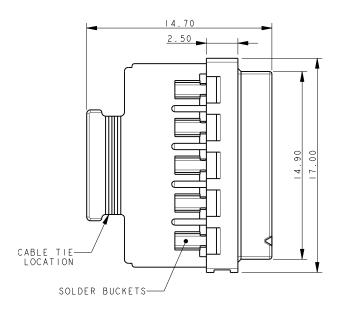


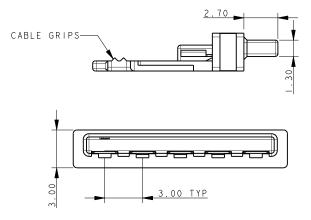


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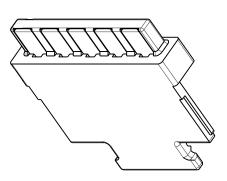
### PLUG WIRED 5 WAY 2 PART 9159 LIGHTING CONNECTOR

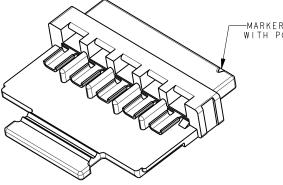




#### NOTES:

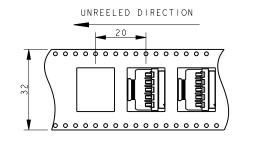
- FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
   CABLE TIE SUPPLIED FOR WIRE RETENTION, ATTACHED TO EACH REEL.
- SPARES CAN BE ORDERED, REFER TO PAGE 17.
- 3. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCED.
- 4. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 9.
- 5. CONTACT MATERIAL: 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.

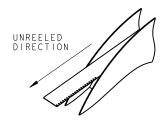




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### PACKING DETAILS CABLE TIES SUPPLIED WITH EACH REEL

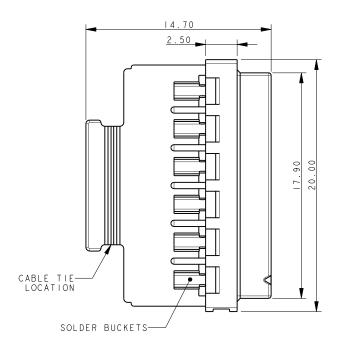


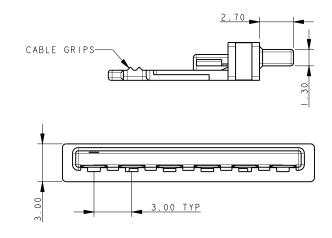






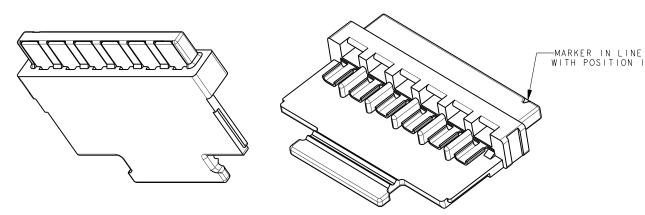
#### PLUG WIRED 6 WAY 2 PART 9159 LIGHTING CONNECTOR



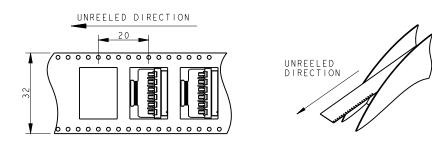


#### NOTES:

- 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.



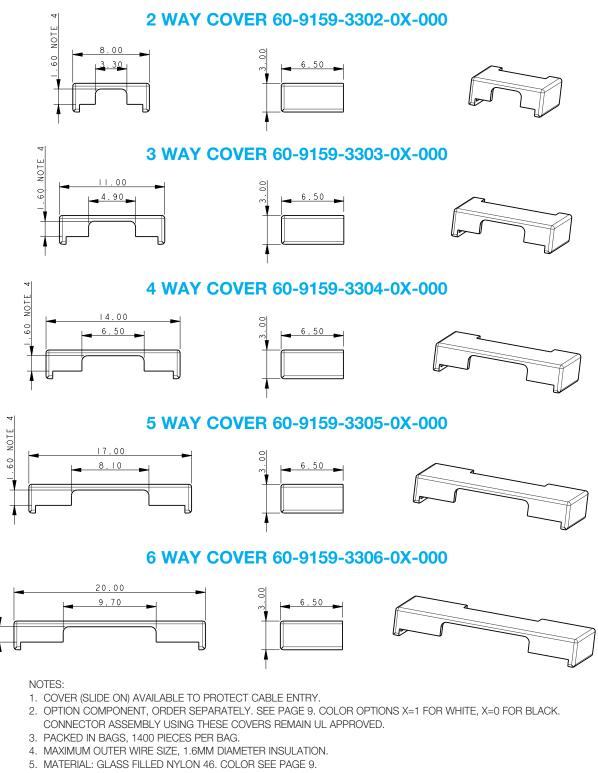
#### PACKING DETAILS CABLE TIES SUPPLIED WITH EACH REEL







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



- 6. COLOR OPTIONS SEE PAGE 9. (ALSO NOTE 2).
- 7. ALL DIMENSIONS ARE REFERENCED DIMENSIONS.
- 8. TO BE ASSEMBLED BEFORE CABLE TIE.
- 9. REFER TO APPLICATIONS NOTES 201-01-123 FOR FURTHER DETAILS.



NOTE

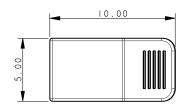
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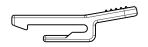


### PLUG WIRED LATCHES ACCESSORY NOT SUPPLIED WITH CONNECTOR ASSEMBLY

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

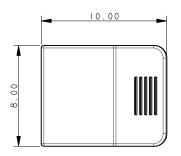






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#### LATCH 60-9159-3403-0X-000 USED ON 3 AND 5 WAY ASSEMBLIES









#### 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.





#### PLUG WIRED ACCESSORY ORDERING CODES

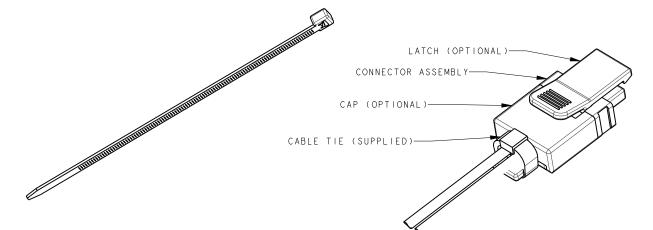
Connector Assembly	Optional Components					
Part Number	Cover (see page 15)	Latch (see page 16)				
11-9159-002-101-X16	60-9159-3302-0X-000	60-9159-3402-0X-000				
11-9159-003-101-X16	60-9159-3303-0X-000	60-9159-3403-0X-000				
11-9159-004-101-X16	60-9159-3304-0X-000	60-9159-3402-0X-000				
11-9159-005-101-X16	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				

"X" FOR COLOR OPTION SEE TABLE ON PAGE 9.

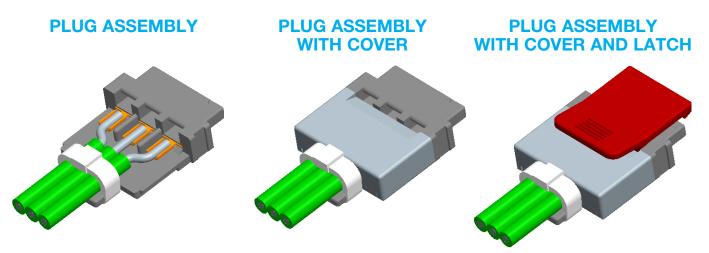
WHEN USING OPTIONS 8 AND 9 UL CONNECTOR OPTIONS ARE UL APPROVED.

#### **CABLE TIE**

Supplied in bags with each reel of connector 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**



### **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

### AVX:

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