## **Horizontal Plug: BTB**

10-9159





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.

## **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: -40°C to +125°C

## **MECHANICAL**

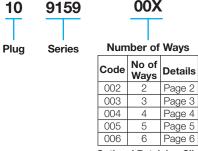
Insulator Material: Nylon: VL94VO

• Contact Material: BeCu / Phos Bronze

• Plating: Gold / Tin over Nickel

• Durability: 10 Cycles

## **HOW TO ORDER**



**Optional Retaining Clip** Page 7

00X



Connector





Color/Approval				
Code	Color	Approval		
9	White	UL Approved		



Tin on Solder Tail

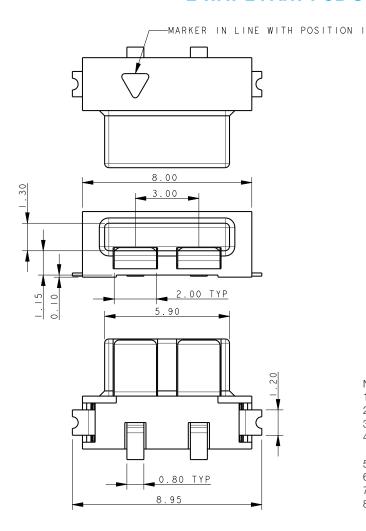


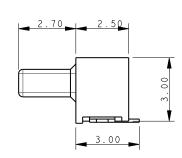
Certification: UL File #E90723

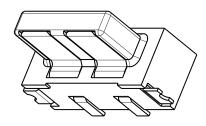




# PLUG 2 WAY 2 PART PCB STRIP CONNECTOR

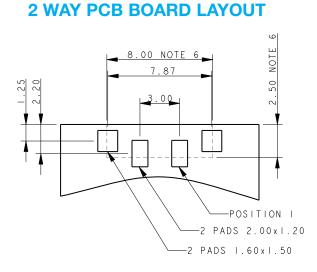


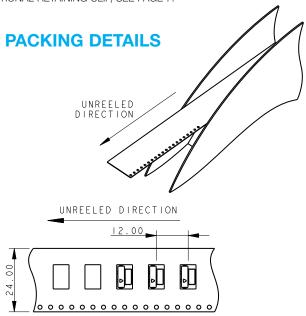




#### NOTES:

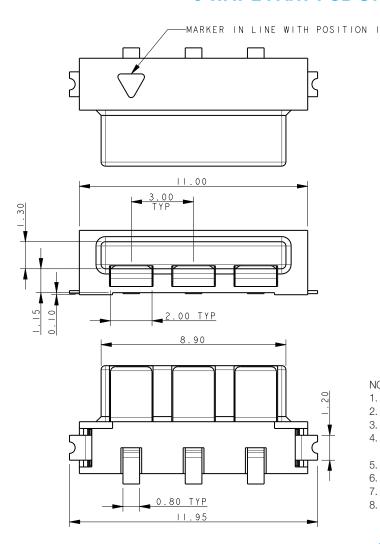
- 1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
- 2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
- 3. INSULATOR MATERIAL: NYLON 46.
- 4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
- 5. BRACKETS: COPPER ALLOY, TIN PLATED.
- 6. OUTLINE OF CONNECTOR.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

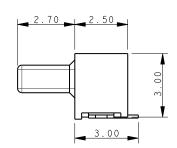


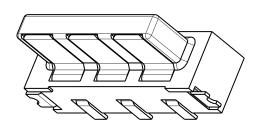




# PLUG 3 WAY 2 PART PCB STRIP CONNECTOR







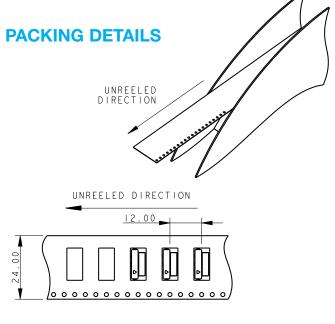
#### **NOTES**

- 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.



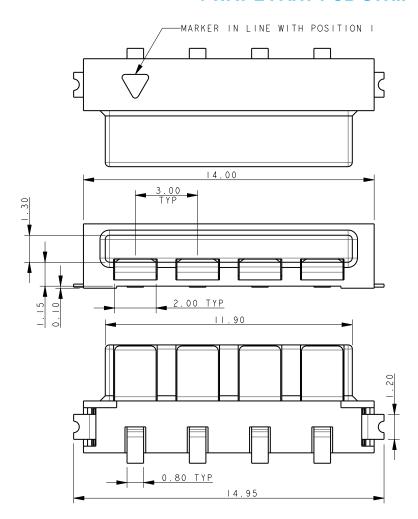
# 11.00 NOTE 6 10.87 2 SPACES 3.00 = 6.00 POSITION 3 PADS 2.00x1.20 2 PADS 1.60x1.50

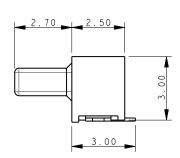
**3 WAY PCB BOARD LAYOUT** 

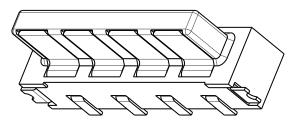




# PLUG 4 WAY 2 PART PCB STRIP CONNECTOR

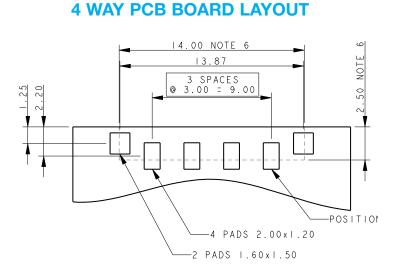


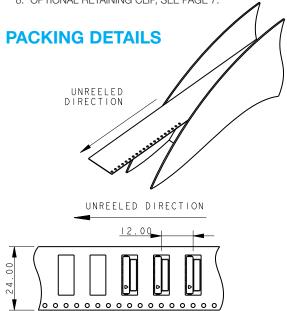




#### NOTES:

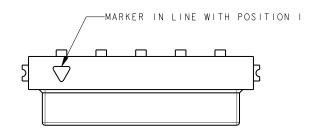
- 1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
- 2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
- 3. INSULATOR MATERIAL: NYLON 46.
- 4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
- 5. BRACKETS: COPPER ALLOY, TIN PLATED.
- 6. OUTLINE OF CONNECTOR.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

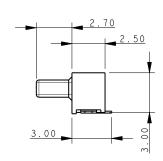


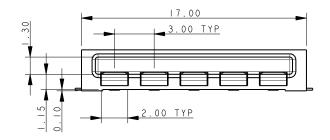


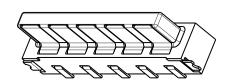


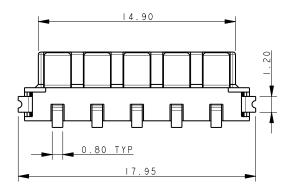
# PLUG 5 WAY 2 PART PCB STRIP CONNECTOR







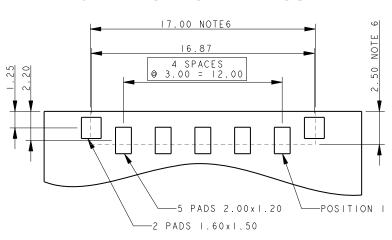


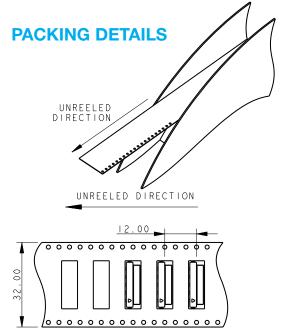


#### NOTES

- 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 7.

## **5 WAY PCB BOARD LAYOUT**

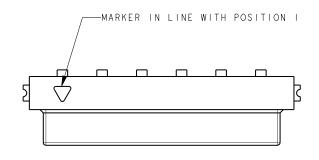


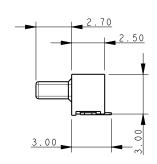


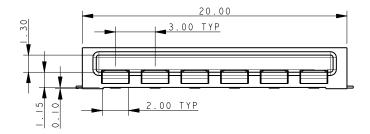


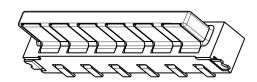


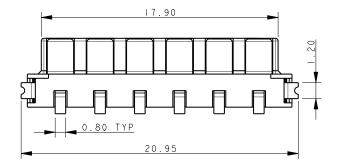
# PLUG 6 WAY 2 PART PCB STRIP CONNECTOR







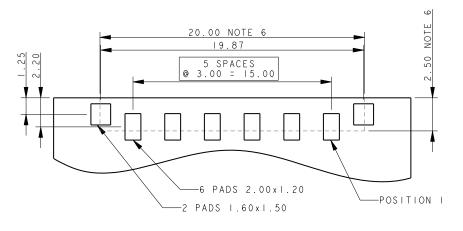


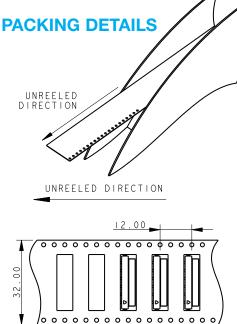


#### NOTES:

- 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 7.

## **6 WAY PCB BOARD LAYOUT**



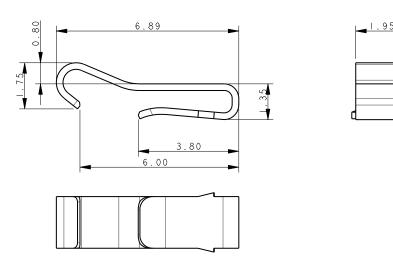


## **Horizontal Plug: BTB**

10-9159

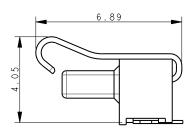


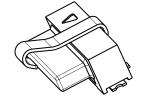
## 80-9159-4200-00-000 ACCESSORY RETAINING CLIP



## PLUG ASSEMBLY FOR REFERENCE ONLY

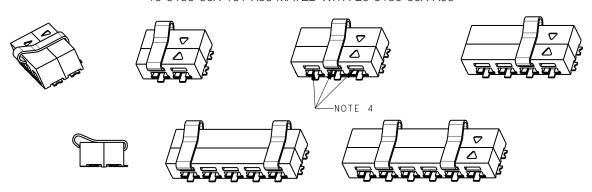
CLIP INSERTED INTO 10-9159-00X-101-X06





## MATED ASSEMBLY - FOR REFERENCE ONLY

10-9159-00X-101-X06 MATED WITH 20-9159-00X-X06



Description	# of Positions	Part Number	UL File #
Horizontal Plug w/pre-installed locking clip	2	58 9159 002 000 015	E90723
Horizontal Plug w/pre-installed locking clip	3	58 9159 003 000 015	E90723
Horizontal Plug w/pre-installed locking clip	4	58 9159 004 000 015	E90723
Horizontal Plug w/pre-installed locking clips	5	58 9159 005 000 015	E90723
Horizontal Plug w/pre-installed locking clips	6	58 9159 006 000 015	E90723

#### NOTES

- 1. CLIP TO RETAIN MATED PAIR PLUG AND SOCKET.
- 2. MATERIAL: STAINLESS STEEL.
- 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.

## 单击下面可查看定价,库存,交付和生命周期等信息

## >>AVX