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: -40ºC to +125ºC

MECHANICAL

- Insulator Material: Nylon: VL94VO
- Contact Material: BeCu / Phos Bronze
- Plating: Gold / Tin over Nickel
- Durability: 10 Cycles

HOW TO ORDER

10 — **Plug**

9159 — **Series**

00X — **Number of Ways**

Code	No of Ways	Details
002	2	Page 2
003	3	Page 3
004	4	Page 4
005	5	Page 5
006	6	Page 6

Optional Retaining Clip
Page 7

1 — **2 Part PCB Strip Connector**

01 — **Connector Pitch**
01 = 3mm

9 — **Color/Approval**

Code	Color	Approval
9	White	UL Approved

16 — **Plating Option**

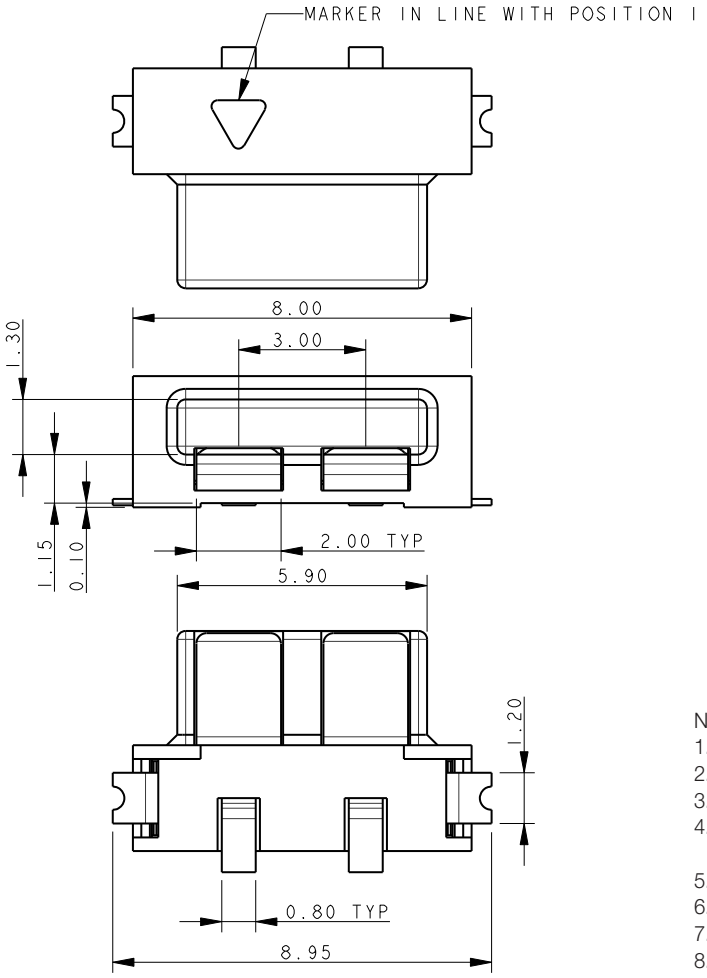
Code	Contact	Bracket
16	Gold in Contact Area Tin on Solder Tail	Tin all over

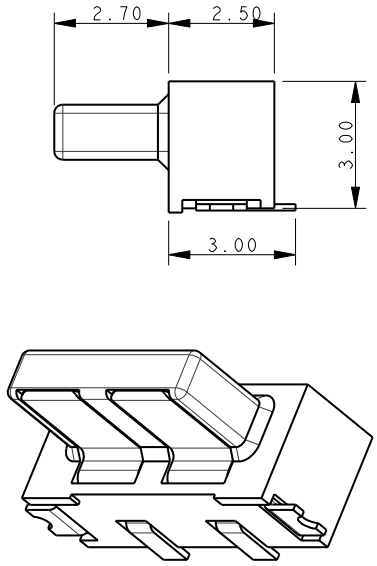
RoHS COMPLIANT

Certification: UL File #E90723

PLUG

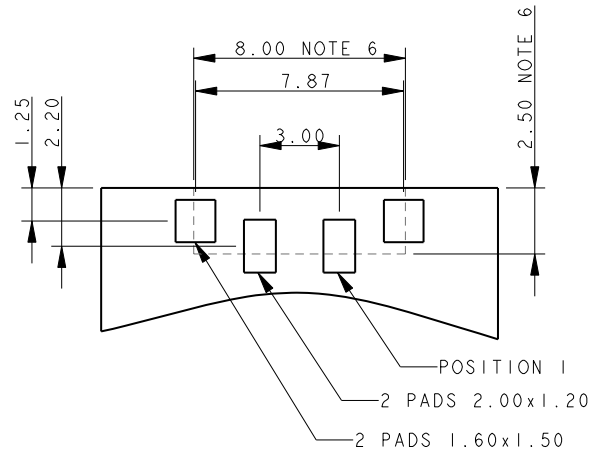
2 WAY 2 PART PCB STRIP CONNECTOR



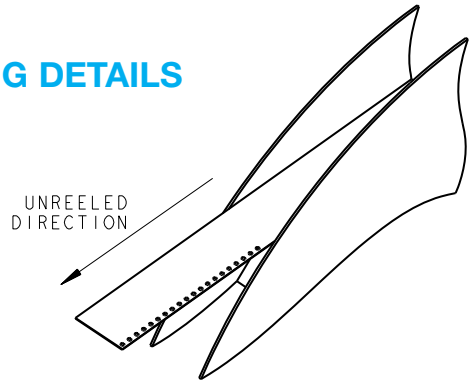


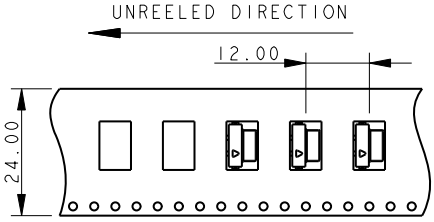
NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46.
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.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

2 WAY PCB BOARD LAYOUT



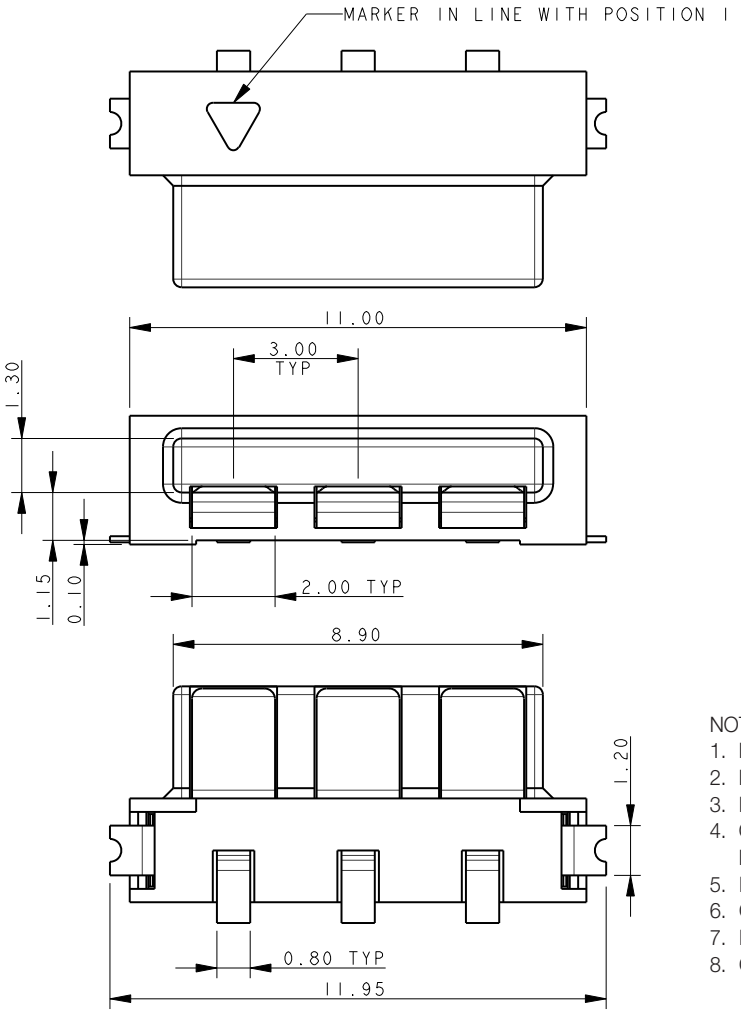
PACKING DETAILS

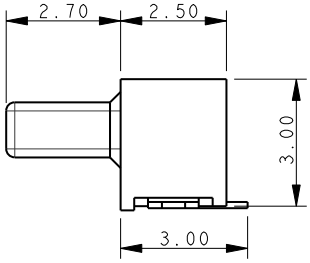


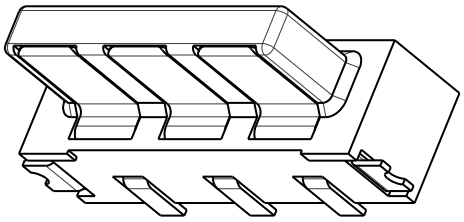


PLUG

3 WAY 2 PART PCB STRIP CONNECTOR







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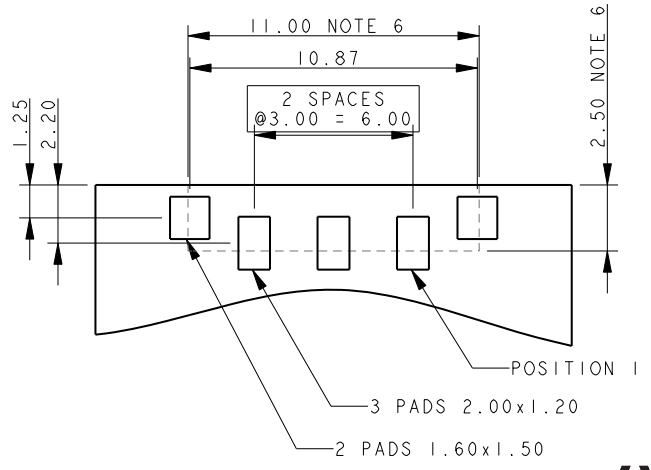
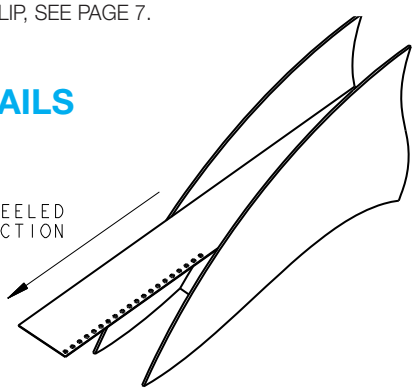
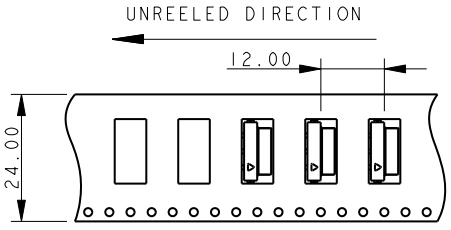
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 7.

3 WAY PCB BOARD LAYOUT



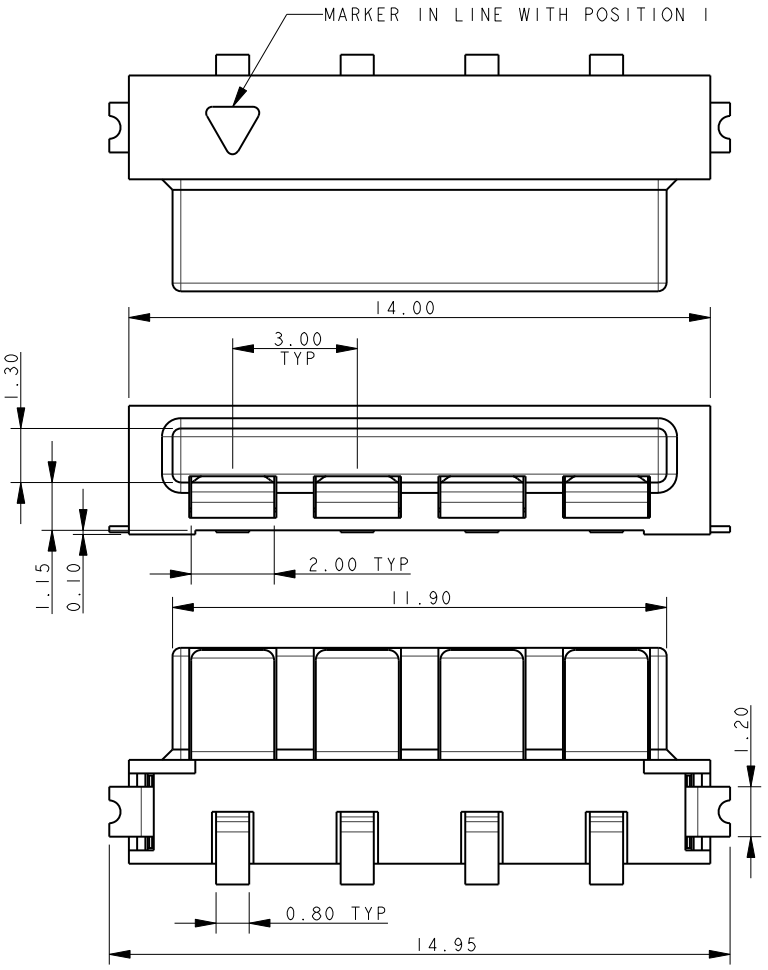
PACKING DETAILS

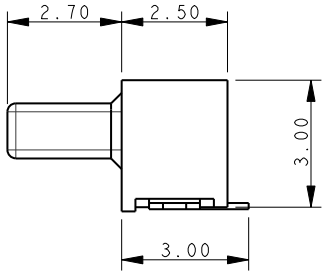


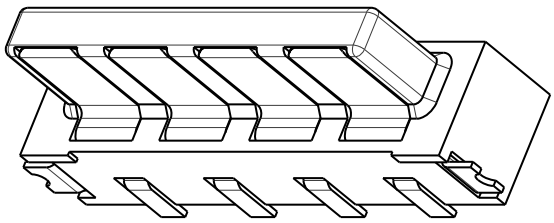


PLUG

4 WAY 2 PART PCB STRIP CONNECTOR







NOTES:

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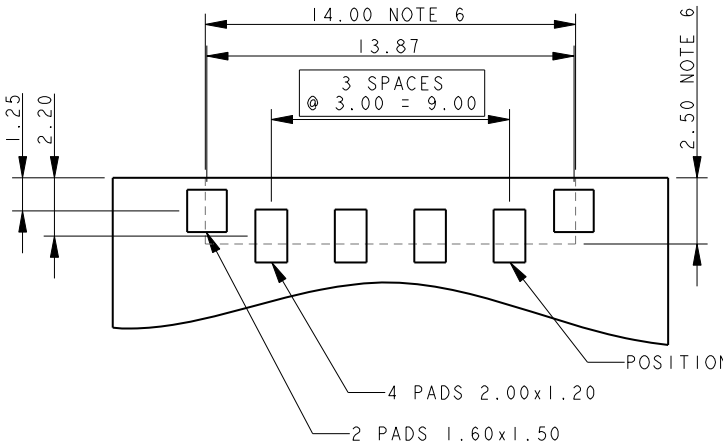
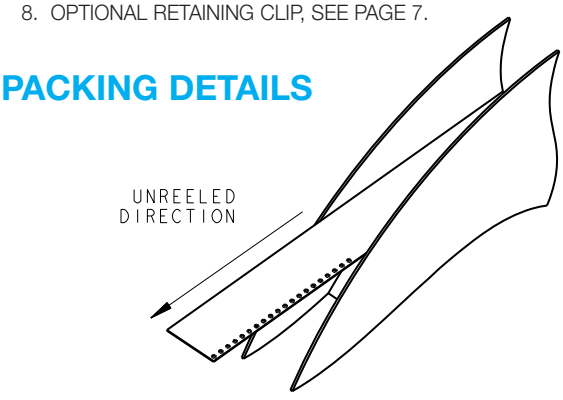
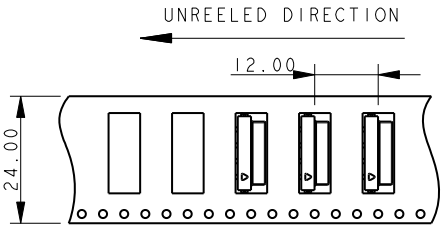
4. CONTACT MATERIAL: COPPER ALLOY, SELECTIVE GOLD OVER NICKEL TIN PLATED ON TAILS.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 7.

4 WAY PCB BOARD LAYOUT



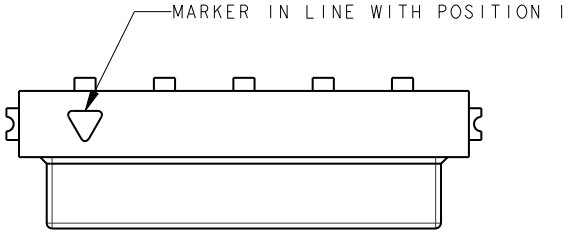
PACKING DETAILS

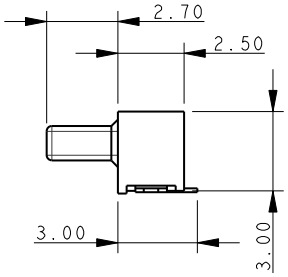


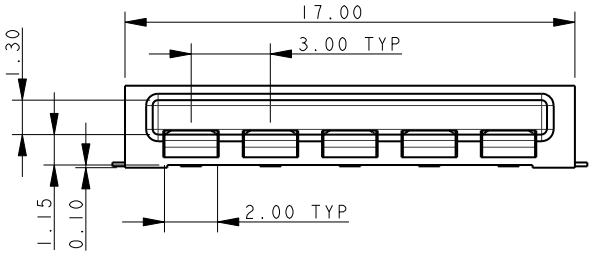


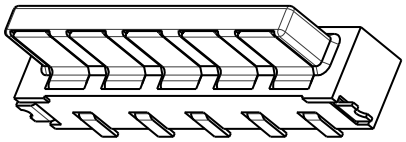
PLUG

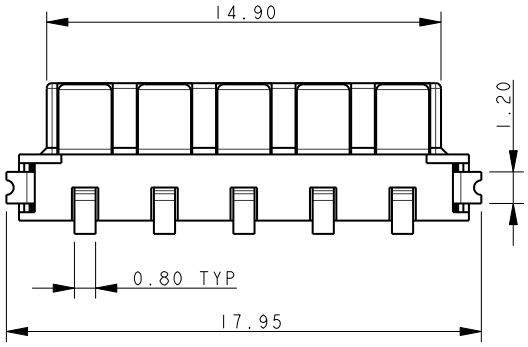
5 WAY 2 PART PCB STRIP CONNECTOR











NOTES:

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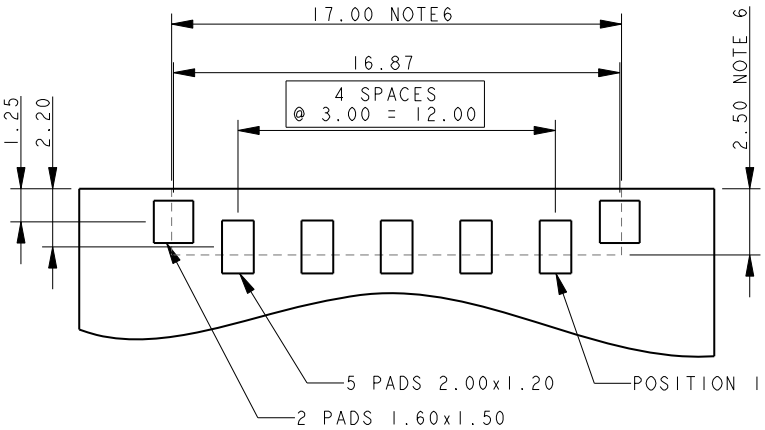
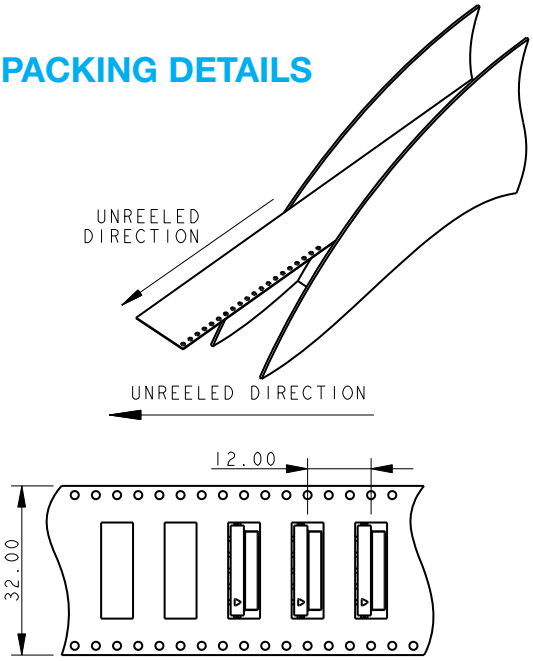
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.
8. OPTIONAL RETAINING CLIP, SEE PAGE 7.

5 WAY PCB BOARD LAYOUT

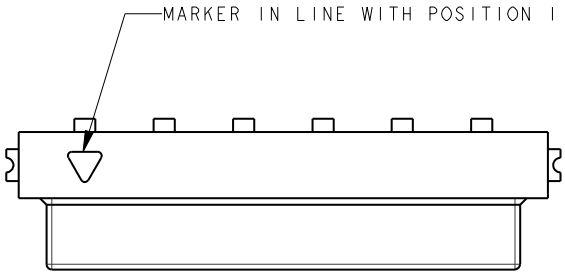


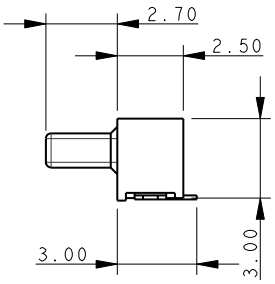
PACKING DETAILS

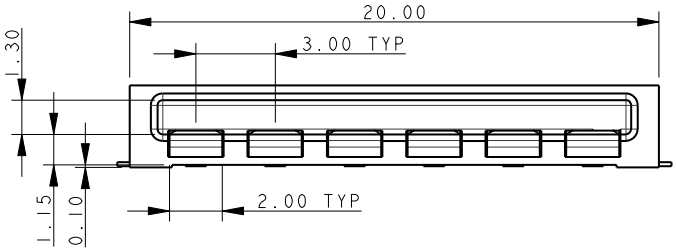


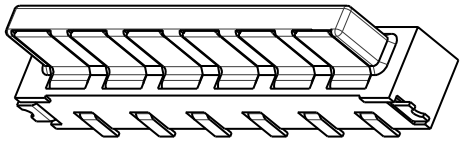
PLUG

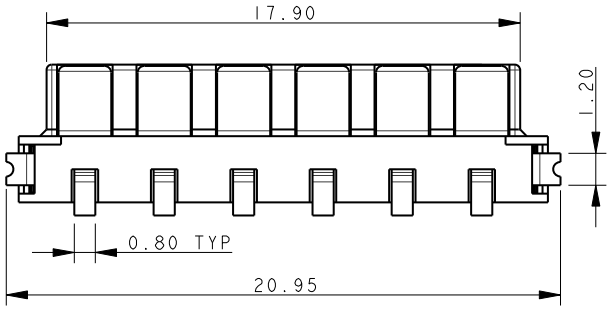
6 WAY 2 PART PCB STRIP CONNECTOR











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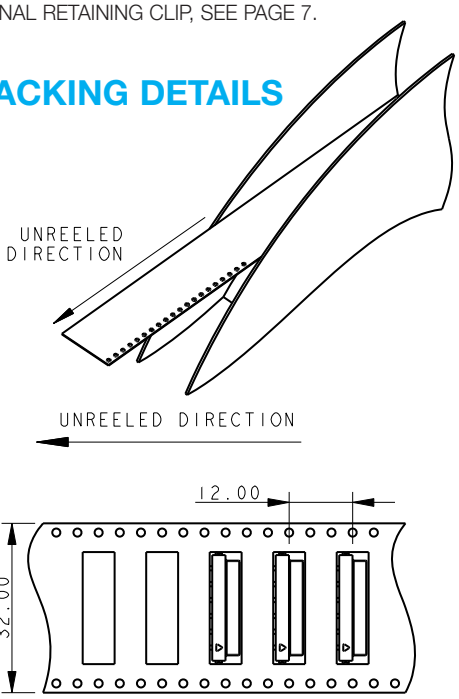
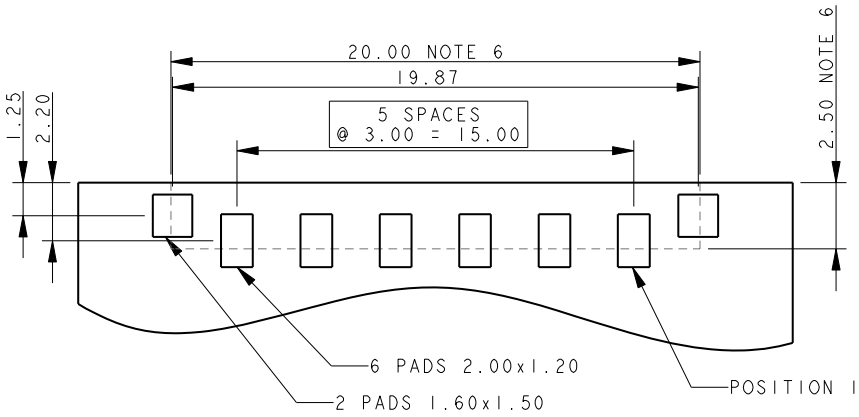
8. OPTIONAL RETAINING CLIP, SEE PAGE 7.

PACKING DETAILS



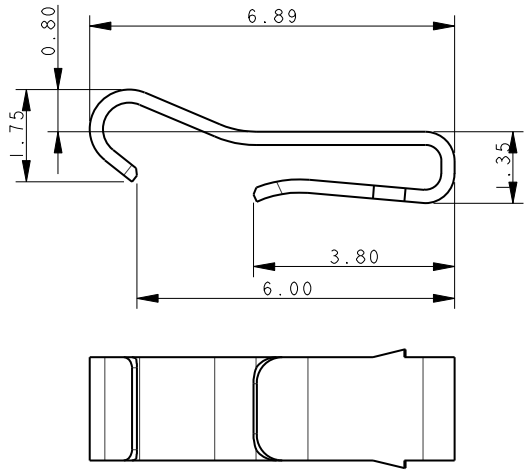
6 WAY PCB BOARD LAYOUT



Horizontal Plug: BTB

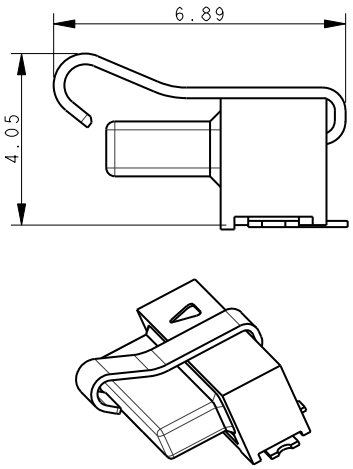
10-9159

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



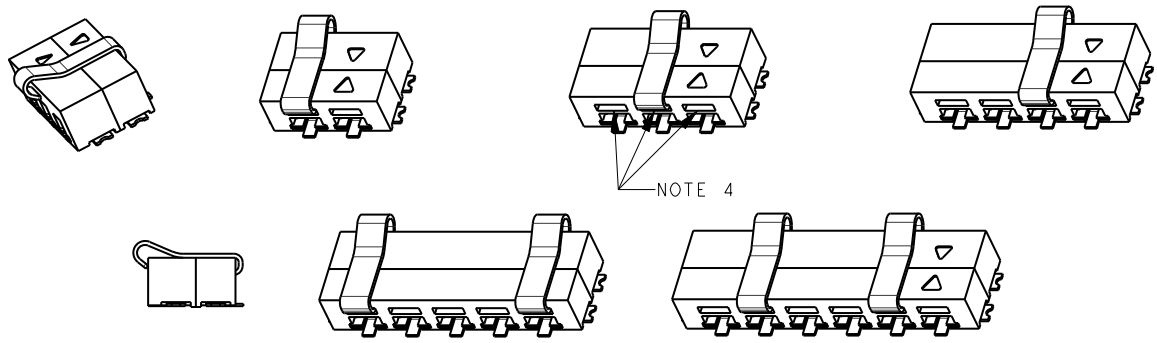
PLUG ASSEMBLY
FOR REFERENCE ONLY

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.

Mouser Electronics

Authorized Distributor

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

AVX:

109159002101916 589159002000015 109159003101016 109159006101016 589159003000015
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