

Horizontal Socket

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. 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.

Additional components in the 9159 product family include:

- SSL - Horizontal Plug; Standard 2-Piece solution (10-9159)
- SSL - Cabled Plug; Supports wire-to-board applications (11-9159)
- 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

- 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
- 3 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: 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

20
Prefix
Socket

9159
Series

XXX
Number of Ways

| Code | No of Ways | Details |
|------|------------|---------|
| 002 | 2 | Page 25 |
| 003 | 3 | Page 26 |
| 004 | 4 | Page 27 |
| 005 | 5 | Page 28 |
| 006 | 6 | Page 29 |

1
2 Part
PCB Strip
Connector

01
Connector
Pitch
01 = 3mm

X
Color Options

| Code | Color | Application |
|------|-------|-------------|
| 0 | Black | Industrial |
| 1 | White | Lighting |

16
Plating Option

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



Certification: UL File #E90723



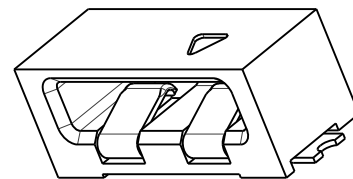
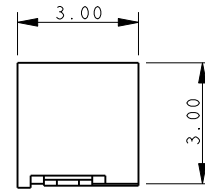
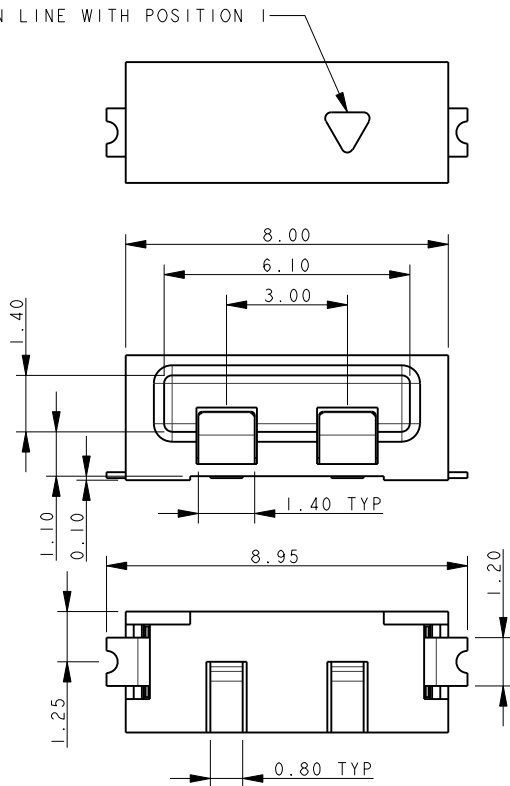
Horizontal Socket

Series 9159



SOCKET 2 WAY 2 PART PCB STRIP CONNECTOR

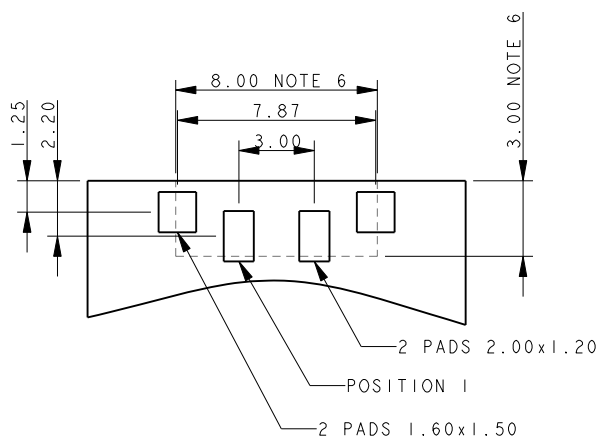
MARKER IN LINE WITH POSITION I



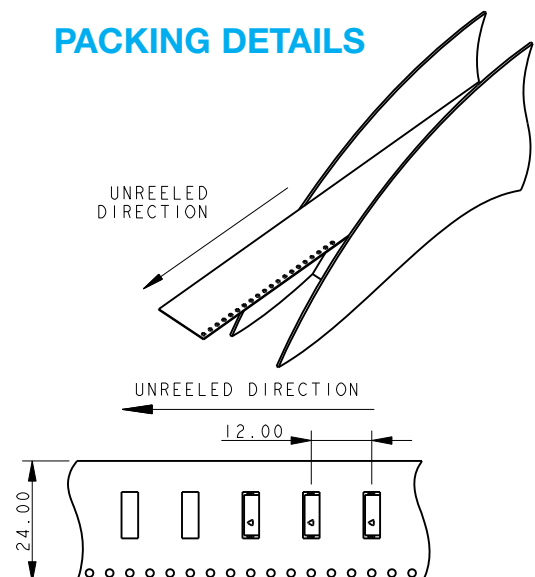
NOTES:

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 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

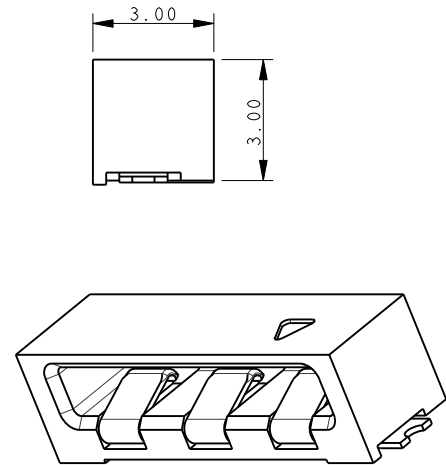
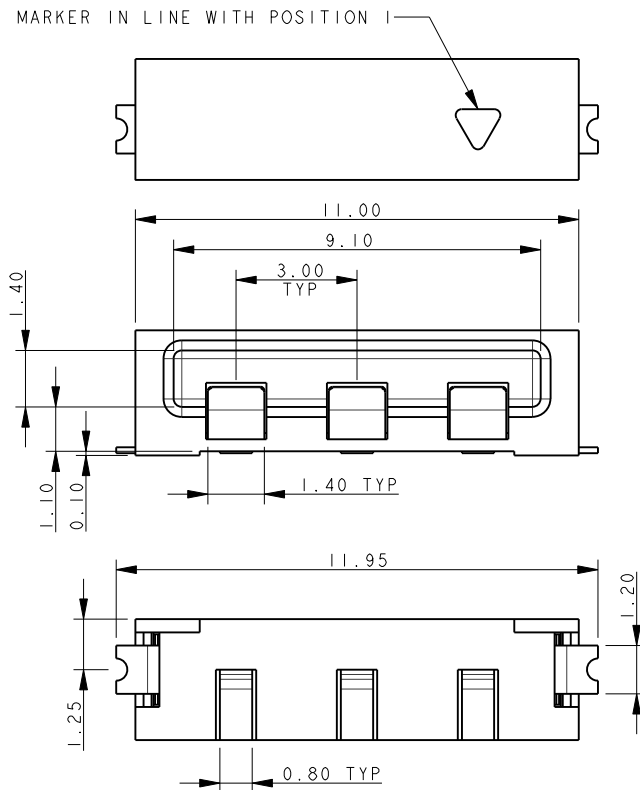
2 WAY PCB BOARD LAYOUT



PACKING DETAILS



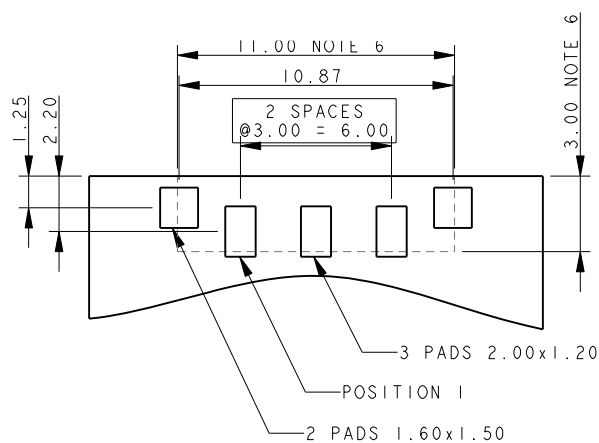
SOCKET 3 WAY 2 PART PCB STRIP CONNECTOR



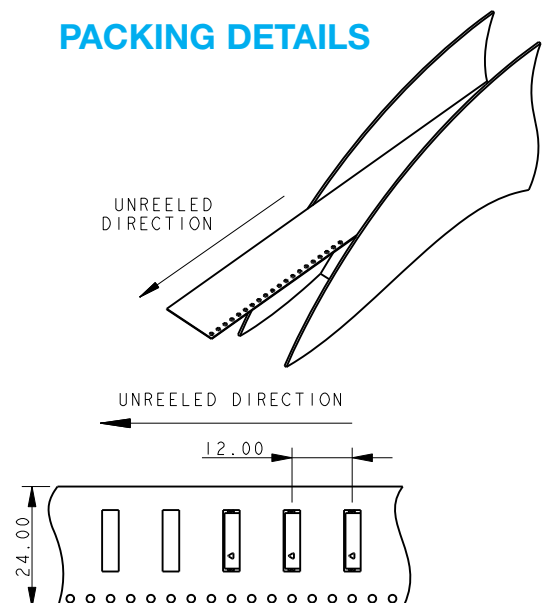
NOTES:

1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

3 WAY PCB BOARD LAYOUT



PACKING DETAILS

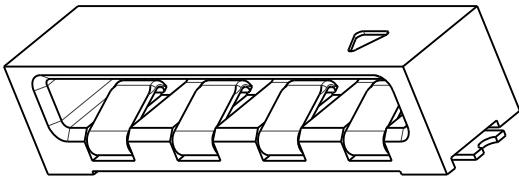
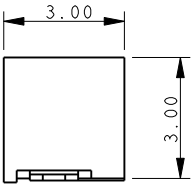
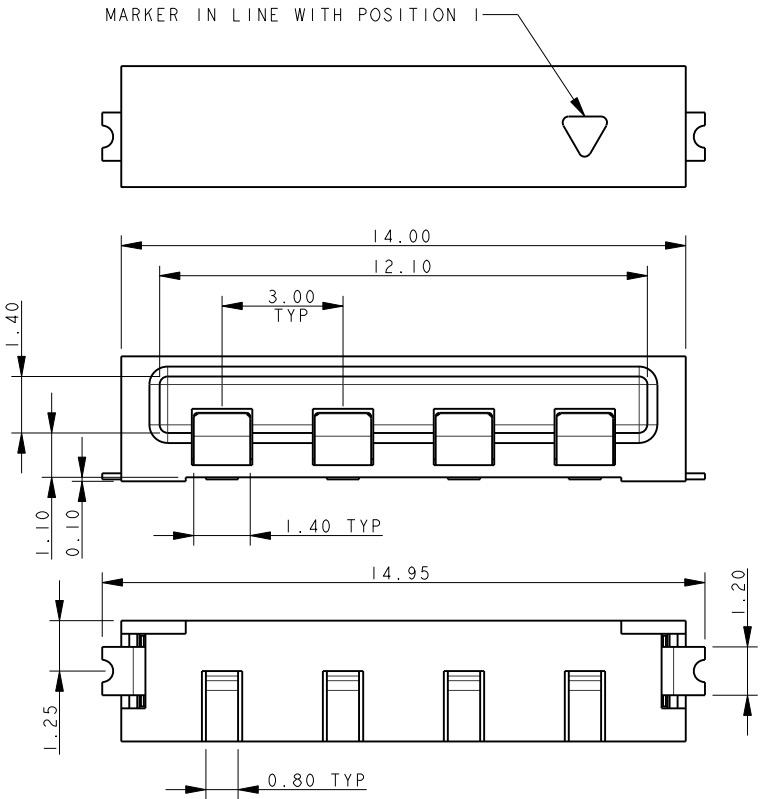


Horizontal Socket

Series 9159

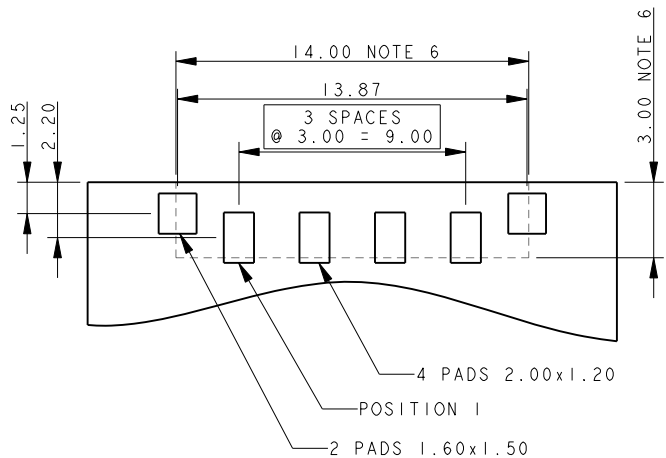


SOCKET 4 WAY 2 PART PCB STRIP CONNECTOR

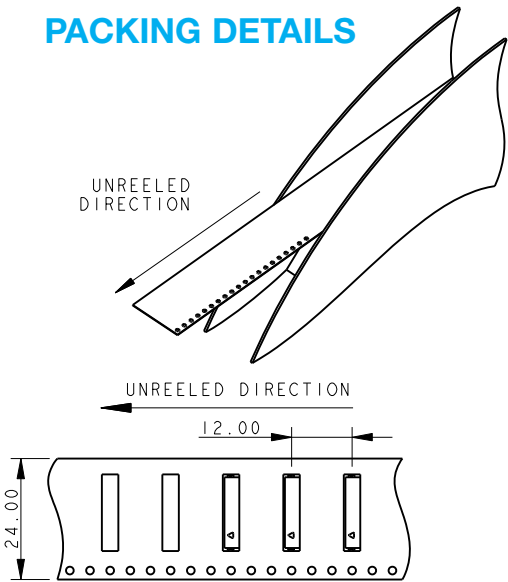


- NOTES:
1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
 2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
 3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
 4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
 5. BRACKETS: COPPER ALLOY, TIN PLATED.
 6. OUTLINE OF CONNECTOR.
 7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

4 WAY PCB BOARD LAYOUT



PACKING DETAILS

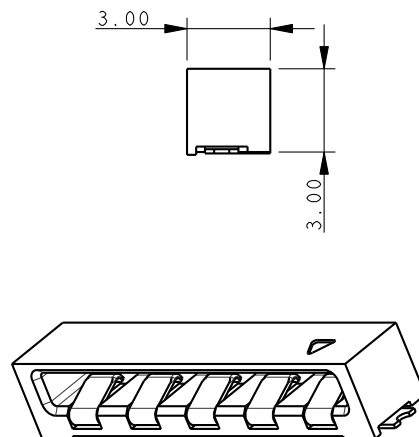
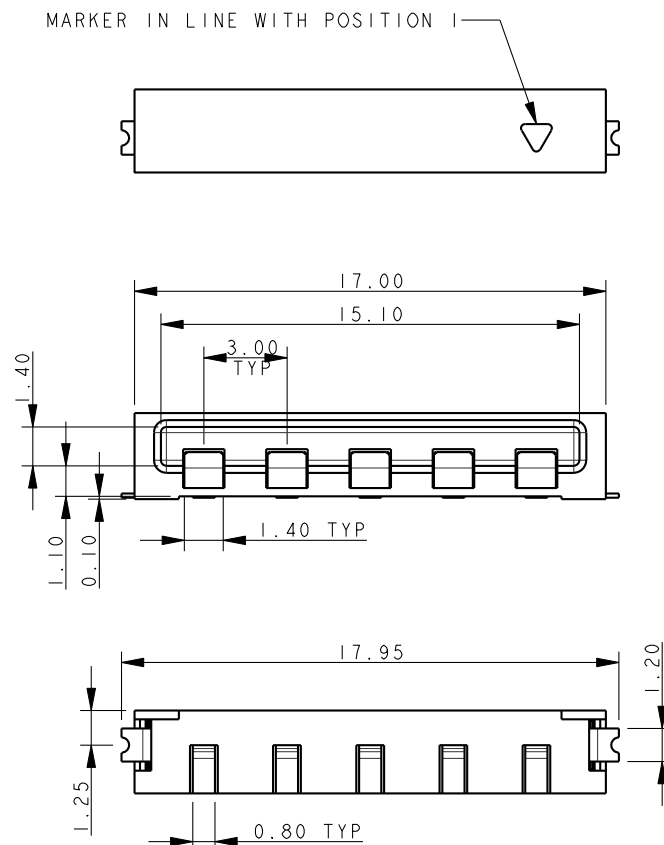


Horizontal Socket

Series 9159



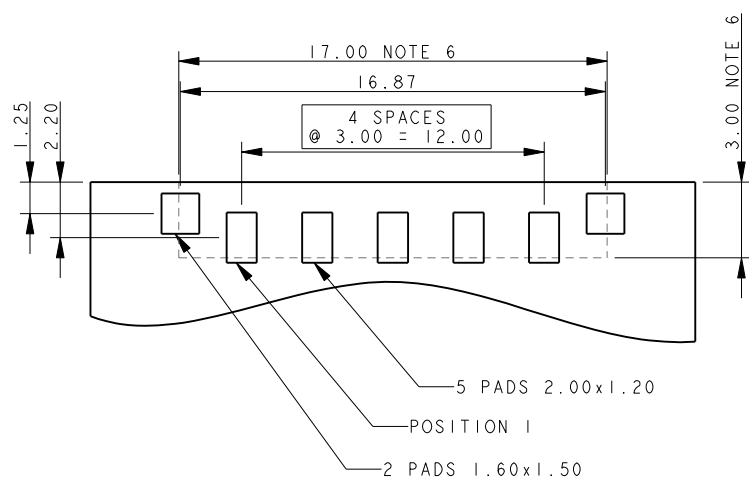
SOCKET 5 WAY 2 PART PCB STRIP CONNECTOR



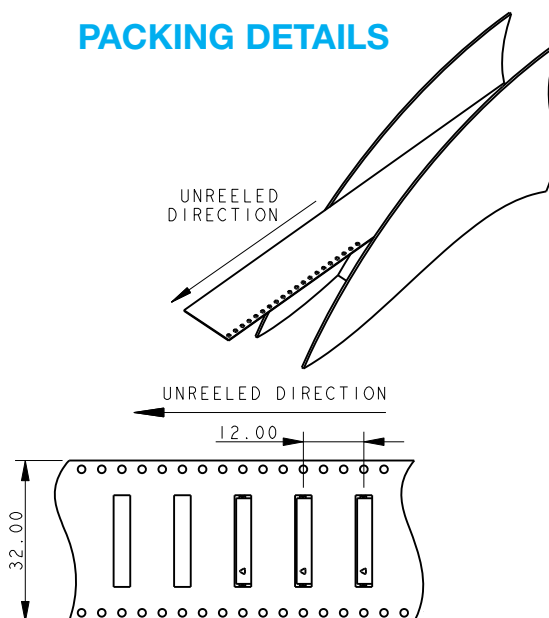
NOTES:

1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

5 WAY PCB BOARD LAYOUT



PACKING DETAILS

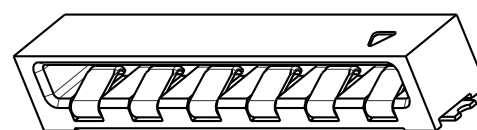
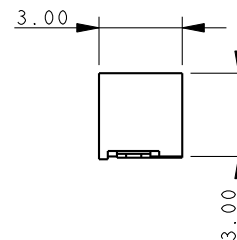
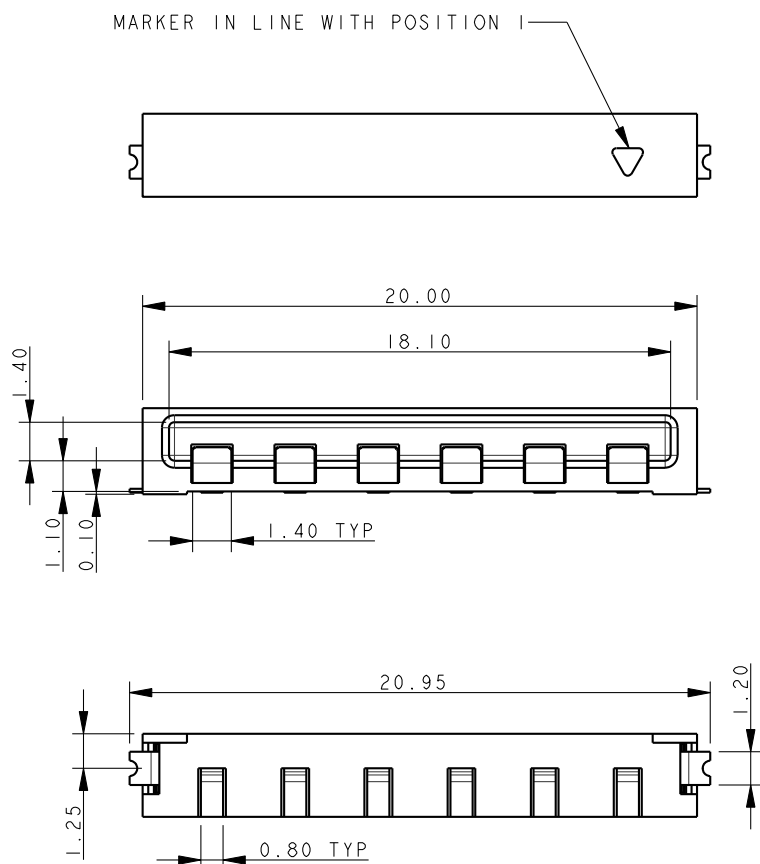


Horizontal Socket

Series 9159



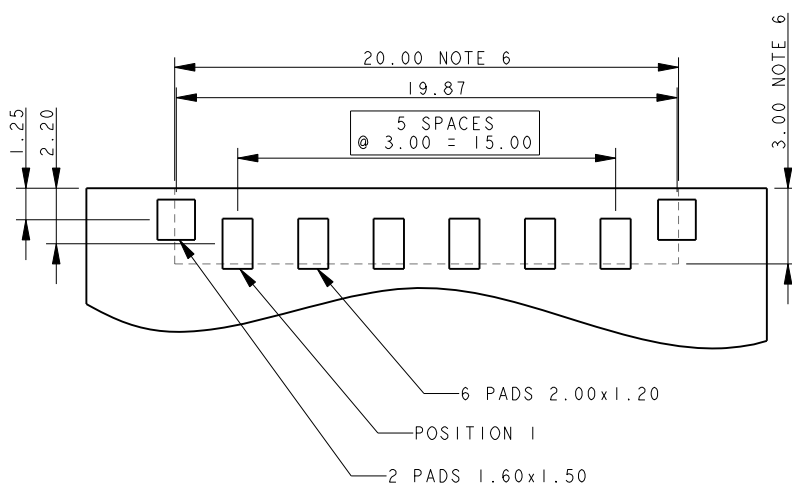
SOCKET 6 WAY 2 PART PCB STRIP CONNECTOR



NOTES:

1. FOR MORE INFORMATION REFER TO PRODUCT SPEC 201-01-119.
2. DIMENSIONS ARE REFERENCE DIMENSIONS UNLESS TOLERANCES.
3. INSULATOR MATERIAL: NYLON 46. COLOR REFER TO PAGE 18.
4. CONTACT MATERIAL: COPPER ALLOY, GOLD OVER NICKEL.
5. BRACKETS: COPPER ALLOY, TIN PLATED.
6. OUTLINE OF CONNECTOR.
7. PACKING TAPE AND REEL, QUANTITY 1400 PER REEL.

6 WAY PCB BOARD LAYOUT



PACKING DETAILS

