



## MCX Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .177 inch D Hole

### RF Connectors Technical Data Sheet

PE4886

#### Configuration

- MCX Jack Connector
- MIL-C-39012
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment
- Bulkhead

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.41:1
- Gold over Nickel Plated Beryllium Copper Contact
- 30  $\mu$ m minimum contact plating

#### Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

#### Description

Pasternack's PE4886 MCX jack bulkhead connector with crimp/solder attachment for RG178 and RG196 (.177 inch D hole) is part of our full line of RF components available for same-day shipping. Our MCX jack connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.41:1. This MCX bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our MCX jack bulkhead connector PE4886 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description                              | Minimum | Typical | Maximum | Units |
|--|---------|---------|---------|-------|
| Frequency Range                          | DC      |         | 6       | GHz   |
| VSWR                                     |         |         | 1.41:1  |       |
| Operating Voltage (AC)                   |         |         | 250     | Vrms  |
| Dielectric Withstanding Voltage (AC)     |         |         | 750     | Vrms  |
| High Potential Voltage<br>at 4 and 7 MHz |         |         | 500     | Vrms  |
| Corona Discharge<br>at 70,000 feet       |         |         | 190     | Vrms  |
| Insulation Resistance                    | 10,000  |         |         | MOhms |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MCX Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .177 inch D Hole PE4886](#)



MCX Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .177 inch D Hole

RF Connectors Technical Data Sheet

PE4886

**Performance by Frequency**

| Description         | F1      | F2 | F3 | F4 | F5 | Units |
|---------------------|---------|----|----|----|----|-------|
| Frequency Range     | DC to 1 |    |    |    |    | GHz   |
| Insertion Loss, Max | 0.1     |    |    |    |    | dB    |

Electrical Specification Notes:  
RF leakage: 55 dB at 2.5 GHz.

**Mechanical Specifications**

**Size**

|               |                     |
|---------------|---------------------|
| Length        | 0.655 in [16.64 mm] |
| Width/Dia.    | 0.25 in [6.35 mm]   |
| Weight        | 0.006 lbs [2.72 g]  |
| Mating Cycles | 500 Cycles          |

**Material Specifications**

| Description | Material         | Plating                            |
|-------------|------------------|------------------------------------|
| Contact     | Beryllium Copper | Gold over Nickel<br>30 µin minimum |
| Insulation  | PTFE             |                                    |
| Body        | Brass            | Nickel<br>100 µin minimum          |

**Environmental Specifications**

**Temperature**

|                 |                                      |
|-----------------|--------------------------------------|
| Operating Range | -65 to +165 deg C                    |
| Humidity        | MIL-STD-202, Method 106              |
| Shock           | MIL-STD-202, Method 213, Condition B |
| Vibration       | MIL-STD-202, Method 204, Condition B |
| Thermal Shock   | MIL-STD-202, Method 107, Condition F |
| Salt Spray      | MIL-STD-202, Method 101, Condition B |

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RF Connectors Technical Data Sheet

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**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

MCX Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .177 inch D Hole from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

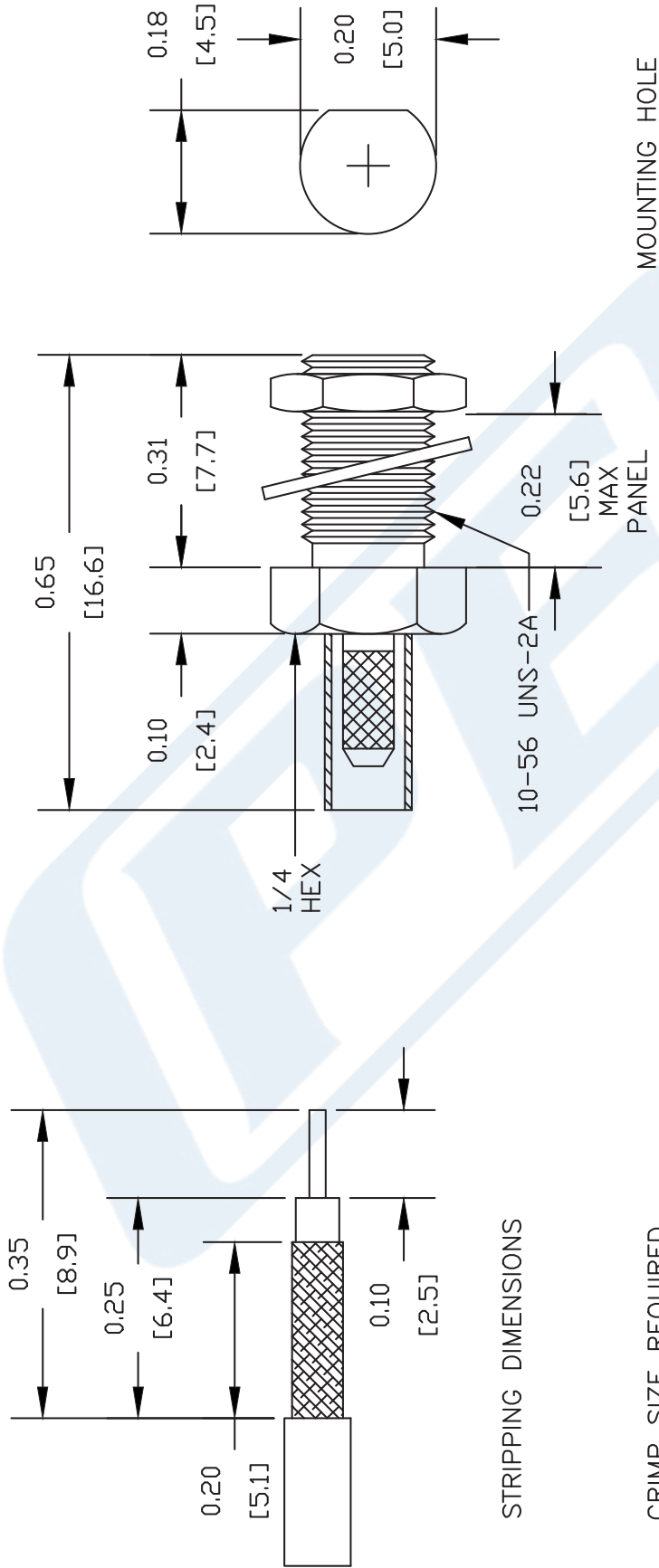
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MCX Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .177 inch D Hole PE4886](#)

URL: <https://www.pasternack.com/mcx-jack-standard-rg178-rg196-connector-pe4886-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

# PE4886 CAD Drawing

MCX Jack Bulkhead Mount Connector Crimp/Solder  
Attachment for RG178, RG196, .177 inch D Hole



DWG TITLE

**PE4886**

- NOTES:
1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
  3. DIMENSIONS ARE IN INCHES [mm].
  4. FITS MIL-C-17 AND EQUIVALENT CABLES.

REV. -

FSCM NO. 53919

CAD FILE 061202

SCALE N/A

SIZE A

127

**PE PASTERNAK®**

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## SMP Female Connector Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE44655

#### Configuration

- SMP Female Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Solder/Solder Attachment

#### Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.25:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44655 SMP female connector with solder/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMP female connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.25:1. The Pasternack blind mate connector is ideal for applications where direct visual or tactile access to the connection point is not possible, for example, when two circuit boards need to be mated.

Our SMP female connector PE44655 datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

| Description     | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | DC      |         | 3       | GHz   |
| VSWR            |         |         | 1.25:1  |       |

#### Mechanical Specifications

| Size       |                    |
|------------|--------------------|
| Length     | 0.25 in [6.35 mm]  |
| Width/Dia. | 0.135 in [3.43 mm] |
| Weight     | 0.003 lbs [1.36 g] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Connector Solder Attachment for RG178, RG196 PE44655](#)



## SMP Female Connector Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE44655

#### Material Specifications

| Description | Material         | Plating             |
|-------------|------------------|---------------------|
| Contact     | Beryllium Copper | Gold<br>MIL-G-45204 |
| Insulation  | PTFE             |                     |
| Body        | Beryllium Copper | Gold<br>MIL-G-45204 |

#### Environmental Specifications

##### Temperature

Operating Range -55 to +125 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

SMP Female Connector Solder Attachment for RG178, RG196 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Connector Solder Attachment for RG178, RG196 PE44655](#)

URL: <https://www.pasternack.com/smp-female-standard-rg178-rg196-connector-pe44655-p.aspx>

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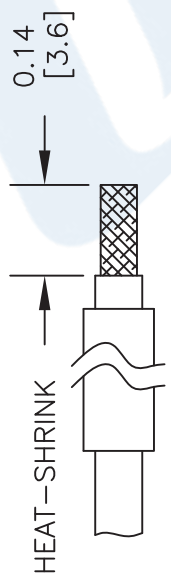
# PE44655 CAD Drawing

SMP Female Connector Solder Attachment for RG178, RG196

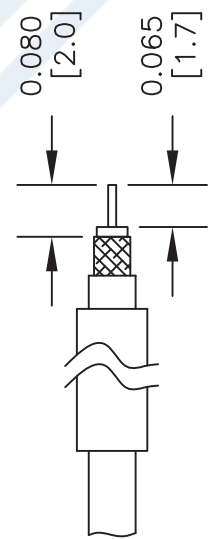


### ASSEMBLY PROCEDURES

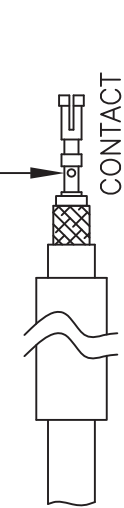
1. INSERT HEAT SHRINK TUBE ON CABLE; STRIP CABLE TO DIMENSION SHOWN. DIP END OF CABLE INTO FLUX AND THEN TIN BRAID.



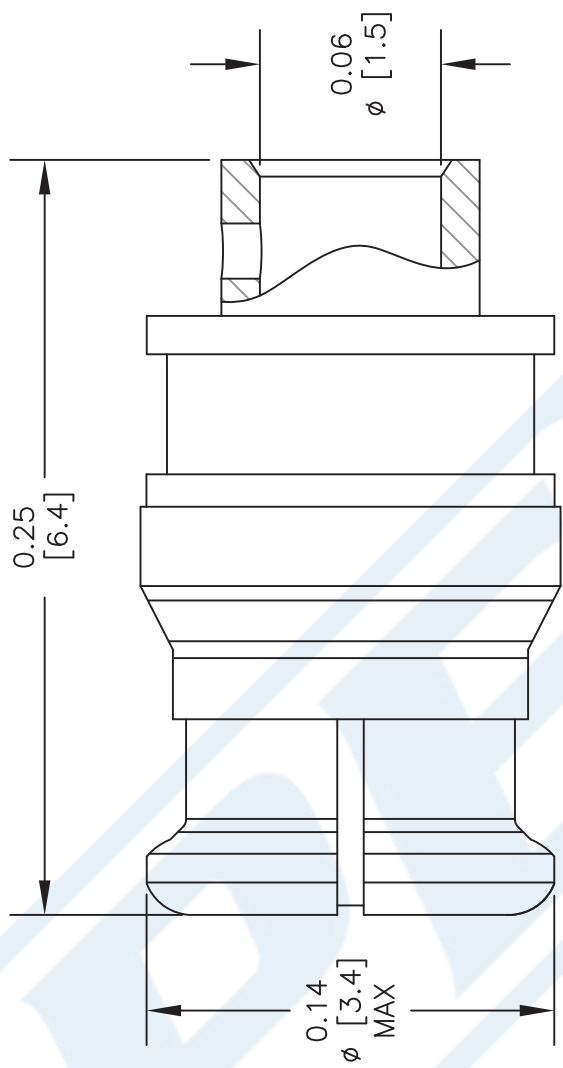
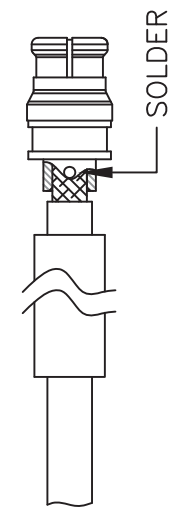
2. AFTER PRE TINNING TRIM TO DIMENSION SHOWN.



3. SOFT SOLDER CONTACT.



4. INSTALL CABLE INTO BODY AND SOLDER CABLE TO BODY AS SHOWN, SLIDE HEAT-SHRINK TUBE TOWARDS BODY SHOULDER AND SHRINK TO FIT.



DWG TITLE

**PE44655**

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 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

FSCM NO. 53919

CAD FILE 071113

SCALE N/A

SIZE A

2233



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## Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG178B/U

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Electrical Specifications

| Description             | Minimum | Typical      | Maximum | Units        |
|-------------------------|---------|--------------|---------|--------------|
| Frequency Range         | DC      |              | 3       | GHz          |
| Impedance               |         | 50           |         | Ohms         |
| Velocity of Propagation |         | 70           |         | %            |
| Operating Voltage (AC)  |         |              | 1,000   | Vrms         |
| Nominal Capacitance     |         | 29.4 [96.46] |         | pF/ft [pF/m] |

#### Performance by Frequency Band

| Description      | F1    | F2    | F3    | F4     | F5 | Units    |
|------------------|-------|-------|-------|--------|----|----------|
| Frequency        | 0.1   | 0.4   | 1     | 3      |    | GHz      |
| Attenuation, Typ | 13.81 | 27.8  | 44.41 | 78.4   |    | dB/100ft |
|                  | 45.31 | 91.21 | 145.7 | 257.22 |    | dB/100m  |

#### Mechanical Specifications

|                             |                          |
|-----------------------------|--------------------------|
| Diameter                    | 0.072 in [1.83 mm]       |
| Weight                      | 0.005 lbs/ft [0.01 Kg/m] |
| Min. Bend Radius (Repeated) | 0.4 in [10.16 mm]        |

#### Construction Specifications

| Description     | Material and Plating                 | Diameter           |
|-----------------|--------------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, Silver, 7 Strands | 0.012 in [0.3 mm]  |
| Conductor Type  | Stranded                             |                    |
| Dielectric      | PTFE                                 | 0.034 in [0.86 mm] |
| First Shield    | Silver Plated Copper Braid           | 0.051 in [1.3 mm]  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

## Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket

### RF Cables Technical Data Sheet

RG178B/U

|        |          |                    |
|--------|----------|--------------------|
| Jacket | FEP, Tan | 0.072 in [1.83 mm] |
|--------|----------|--------------------|

#### Environmental Specifications

##### Temperature

Operating Range -55 to +200 deg C

**Compliance Certifications** (see [product page](#) for current document)

#### Plotted and Other Data

Notes:

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

URL: <https://www.pasternack.com/flexible-0.075-rg178-50-ohm-coax-cable-fep-jacket-rg178b-u-p.aspx>

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# RG178B/U CAD Drawing

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket



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DWG TITLE  
**RG178B/U**

CAGE CODE 53919

CAD FILE 062117

SCALE N/A

SIZE A

2233



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