



## RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45008

#### Configuration

- SMA Male Reverse Polarity Connector
- Straight Body Geometry
- Connector Interface Types: RG178, RG196
- 5/16 inch Hex

#### Features

- Gold Plated Copper Contact
- Reverse Polarity

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45008 RP SMA male connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. The male reverse polarity configuration uses a male connector body with a female inner contact receptacle.

Our reverse polarity SMA male connector PE45008 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.

#### Mechanical Specifications

##### Size

|            |                     |
|------------|---------------------|
| Length     | 0.645 in [16.38 mm] |
| Width/Dia. | 0.177 in [4.50 mm]  |

##### Material Specifications

| Description  | Material | Plating |
|--------------|----------|---------|
| Contact      | Copper   | Gold    |
| Insulation   | PTFE     |         |
| Body         | Brass    | Gold    |
| Coupling Nut | Brass    | Gold    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE45008](#)



RP-SMA Male Connector Crimp/Solder  
Attachment for RG178, RG196

RF Connectors  
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**Environmental Specifications**

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

**Plotted and Other Data**

Notes:



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RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196

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Assembly Instruction

### Assembly Instructions

**STEP 1.** MAIN BODY CONTACT PIN BARREL FERRULE  
FRONT INSULATOR REAR INSULATOR HEX NUT

**STEP 2.**

**STEP 3.** CRIMP

**STEP 4.** SOLDER

**STEP 5.**

**STEP 6.**

**STEP 1.** All parts of the connector are shown.

**STEP 2.** Strip the cable inner conductor, dielectric, braid, and jacket as per "RECOMMENDED CABLE STRIPPING DIM'S" in catalog.

**STEP 3.** Slide the HEX NUT and FERRULE onto cable. Then insert the BARREL into braid and dielectric, and slide the FERRULE over braid and crimp it as shown.

**STEP 4.** Slide the REAR INSULATOR against the BARREL. Then insert inner conductor into the CONTACT PIN and solder it as shown.

**STEP 5.** Slide the FRONT INSULATOR against the REAR INSULATOR.

**STEP 6.** Insert cable and parts into the MAIN BODY, then screw the HEX NUT until it is tight.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE45008](#)



## RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE45008

RP-SMA Male Connector Crimp/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 99.4% 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: [RP-SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE45008](https://www.pasternack.com/sma-male-reverse-polarity-rg178-rg196-connector-pe45008-p.aspx)

URL: <https://www.pasternack.com/sma-male-reverse-polarity-rg178-rg196-connector-pe45008-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.





## SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4398

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG178, RG196
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 1 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4398 SMA male connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 1 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4398 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      |         | 1,000   | MHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 250     | Vrms  |

#### Mechanical Specifications

##### Size

|               |                                 |
|---------------|---------------------------------|
| Length        | 1.047 in [26.59 mm]             |
| Width/Dia.    | 0.315 in [8.00 mm]              |
| Weight        | 0.019 lbs [8.62 g]              |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE4398](#)



## SMA Male Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4398

#### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>50 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>100 µin minimum |
| Crimp Sleeve | Brass    | Nickel                    |

#### Environmental Specifications

##### Temperature

Operating Range -65 to +165 deg C

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

#### Plotted and Other Data

Notes:

SMA Male Connector Crimp/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 99.4% 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: [SMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE4398](#)

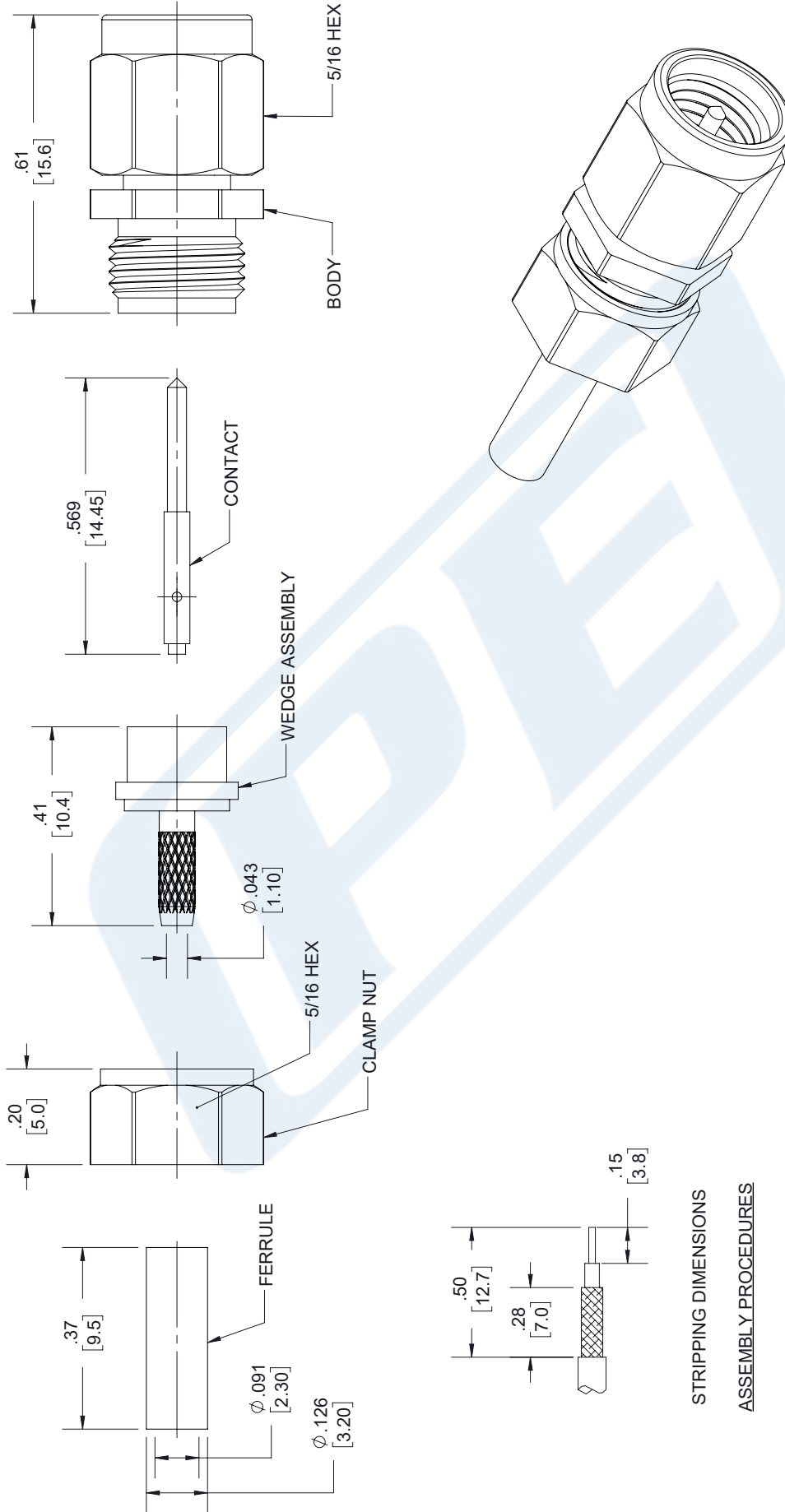
URL: <https://www.pasternack.com/sma-male-standard-rg178-rg196-connector-pe4398-p.aspx>

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# PE4398 CAD Drawing

SMA Male Connector Crimp/Solder Attachment for RG178, RG196

| REVISIONS |                     |          |          |
|-----------|---------------------|----------|----------|
| REV.      | DESCRIPTION         | DATE     | APPROVED |
| A         | PCR PE4398 20200902 | 09/22/20 | SRAUTUS  |



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE & CLAMP NUT OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE OVER BRAID & AGAINST EXTENSION. CRIMP FERRULE USING .100" HEX CRIMP TOOL.
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN TO 8~10 IN-LBS.

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

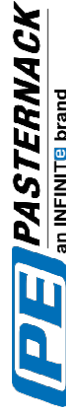
TOLERANCES:  
 .X = ±.2 [5.08] FRACTIONS ±.1/32  
 .XX = ±.02 [.51] ±.1/32  
 .XXX = ±.005 [.13] ANGLES ± 1°  
 CABLE LENGTH (L) TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.



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 THE INFORMATION AND DESIGN RESPONSIBILITY IS THE PROPERTY OF PASTERNAK CORPORATION ALL RIGHTS RESERVED.

SHEET 1 OF 1  
 SCALE N/A



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|          |       |          |        |
|----------|-------|----------|--------|
| REV      | A     | REV      | A      |
| ITEM NO. | 53919 | ITEM NO. | PE4398 |
| DRAWN BY | SLI   | DRAWN BY | SLI    |
| SIZE     | A     | SIZE     | A      |

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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



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].

DWG TITLE  
**RG178B/U**

CAGE CODE 53919

CAD FILE 062117

SCALE N/A

SIZE A

2233

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