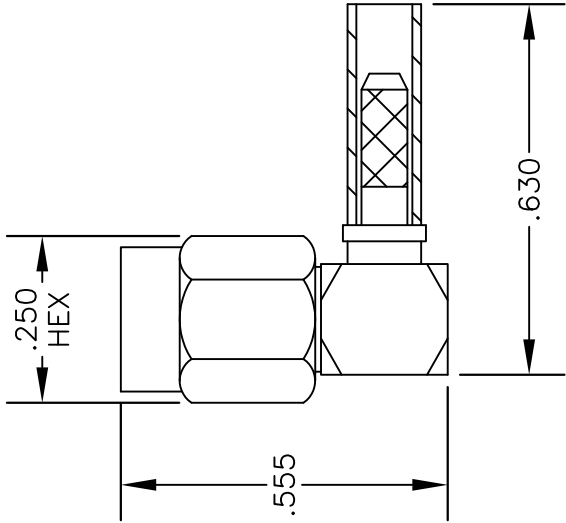


| MATERIALS |                     |
|-----------|---------------------|
| BODY      | BRASS NICKEL PLATED |
| CONTACT   | GOLD PLATED         |
| INSULATOR | PTFE                |
| FERRULE   | GOLD PLATED         |

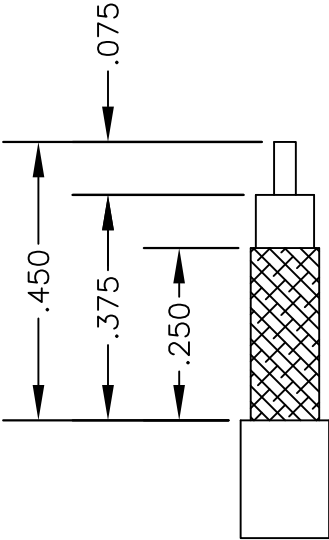


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**COAXIAL & FIBER OPTICS**

|                             |                |                                                                    |
|-----------------------------|----------------|--------------------------------------------------------------------|
| DWG TITLE<br><b>PE44402</b> |                | DES.<br>SSMA MALE RIGHT ANGLE, SOLDER ATTACHMENT FOR RG178 & RG196 |
| SIZE A                      | FSCM NO. 53919 | CAD FILE 082803                                                    |
|                             |                | SCALE N/A                                                          |
|                             |                | 147                                                                |

**NOTES:**

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.



STRIPPING DIMENSIONS

- ASSEMBLY PROCEDURES**
1. STRIP CABLE AS SHOWN & SLIDE FERRULE OVER CABLE.
  2. INSTALL CABLE INTO BODY OF CONNECTOR AND SOFT SOLDER CENTER CONDUCTOR IN PLACE.
  3. SOLDER FERRULE & PRESS CAP DOWN.



## SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

### RF Connectors Technical Data Sheet

**PE45290**

#### Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: RG178, RG196

#### Features

- Max. Operating Frequency 8 GHz
- Excellent VSWR of 1.1:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-DTL-45204
- Blind Mate Connector

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45290 SMP female right angle connector with crimp/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 8 GHz and offers excellent VSWR of 1.1:1. 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. Its right angle body geometry allows for easier connections in tight spaces. Pasternack 8 GHz SMP connectors are designed to offer a low cost alternative where the SMP form factor is desired but the standard SMP frequency range is not needed. The line of 8 GHz SMP connectors is fully compatible with industry standard SMP and GPO® connectors. These SMP connectors offer a low cost high performance blind-mate solution for lower frequency applications. The Male versions of the 8 GHz SMP is available in Full Detent, Limited Detent, and Smooth Bore versions.

Our SMP female right angle connector PE45290 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      |         | 8       | GHz   |
| VSWR            |         |         | 1.1:1   |       |

#### Mechanical Specifications

##### Size

|            |                    |
|------------|--------------------|
| Length     | 0.34 in [8.64 mm]  |
| Width/Dia. | 0.15 in [3.81 mm]  |
| Height     | 0.285 in [7.24 mm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



SMP Female Right Angle Connector Crimp/Solder  
Attachment for RG178, RG196, Up To 8 GHz

## RF Connectors Technical Data Sheet

**PE45290**

Weight 0.005 lbs [2.27 g]

### Material Specifications

| Description     | Material         | Plating               |
|-----------------|------------------|-----------------------|
| Contact         | Beryllium Copper | Gold<br>MIL-DTL-45204 |
| Insulation      | PTFE             |                       |
| Outer Conductor | Beryllium Copper | Gold<br>MIL-DTL-45204 |
| Body            | Brass            | Gold<br>MIL-DTL-45204 |

### Environmental Specifications

#### Temperature

Operating Range

-55 to +155 deg C

Humidity

MIL-STD-202, Method 106 (except 7b omitted)

Shock

MIL-STD-202, Method 213, Condition I

Vibration

MIL-STD-202, Method 204, Condition D

Salt Spray

MIL-STD-202, Method 101, Condition B

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



## SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

### RF Connectors Technical Data Sheet

**PE45290**

SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz 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.

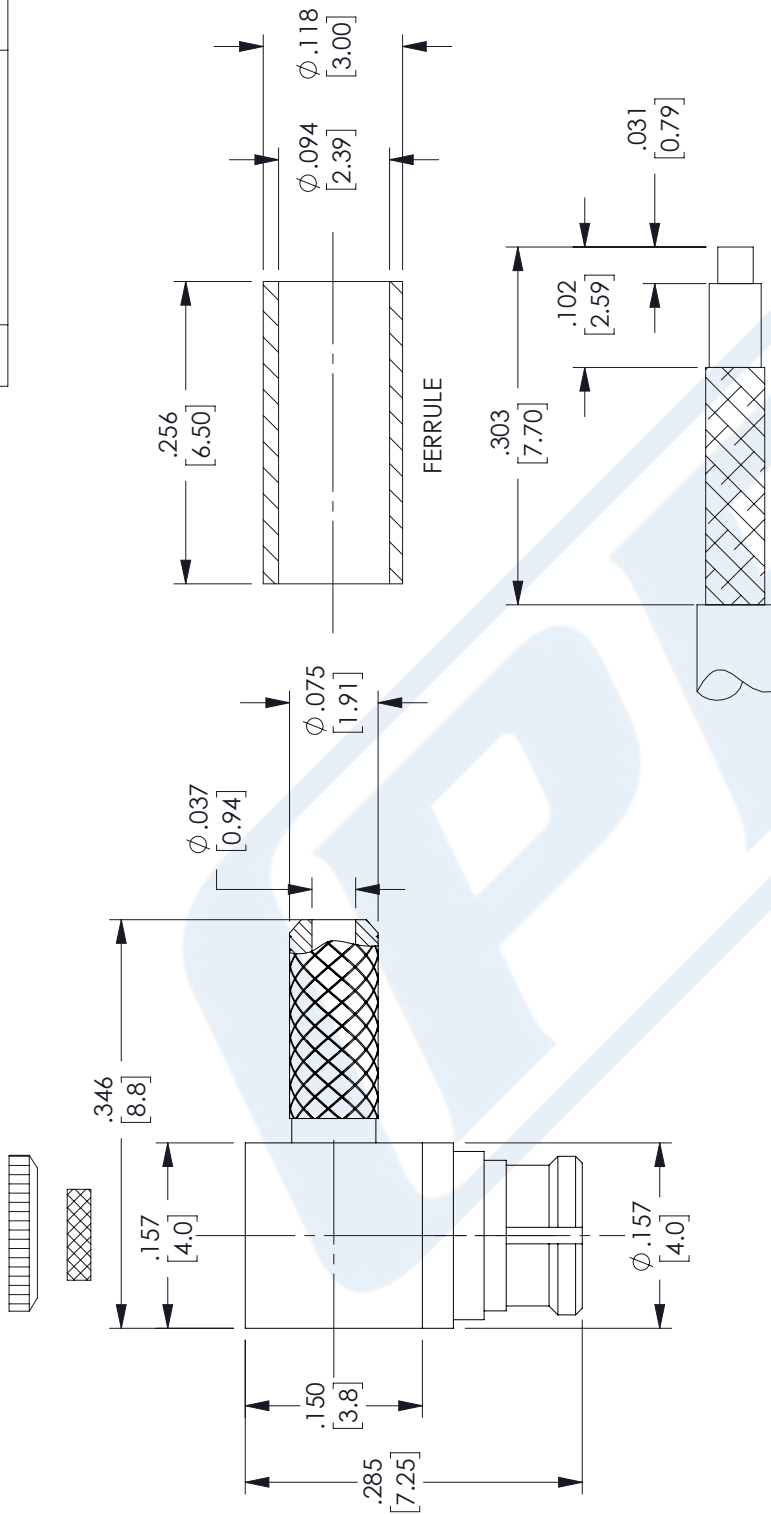
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz PE45290](https://www.pasternack.com/smp-female-rg178-rg196-connector-pe45290-p.aspx)

URL: <https://www.pasternack.com/smp-female-rg178-rg196-connector-pe45290-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.

## SMP Female Right Angle Connector Crimp/Solder Attachment for RG178, RG196, Up To 8 GHz

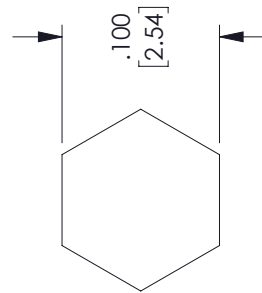
| REVISIONS |                  |            |          |
|-----------|------------------|------------|----------|
| REV.      | DESCRIPTION      | DATE       | APPROVED |
| B         | PE45290 20220616 | 07/01/2022 | AMARG    |



### STRIPPING DIMENSIONS

### ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & TIN CENTER CONDUCTOR.  
SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR & SOLDER CENTER CONDUCTOR IN PLACE.
3. CRIMP FERRULE. INSERT PTFE & PRESS CAP DOWN.



### CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL

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

TOLERANCES:

.X = ± .2 [5.08] FRACTIONS  
.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%L / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION



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DESIGN IN THIS DOCUMENT  
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ALL RIGHTS RESERVED.

SHEET 1 OF 1

SCALE N/A

REV B



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Website: www.pasternack.com  
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SIZE A 53919 WZhang ITEM NO. PE45290

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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.

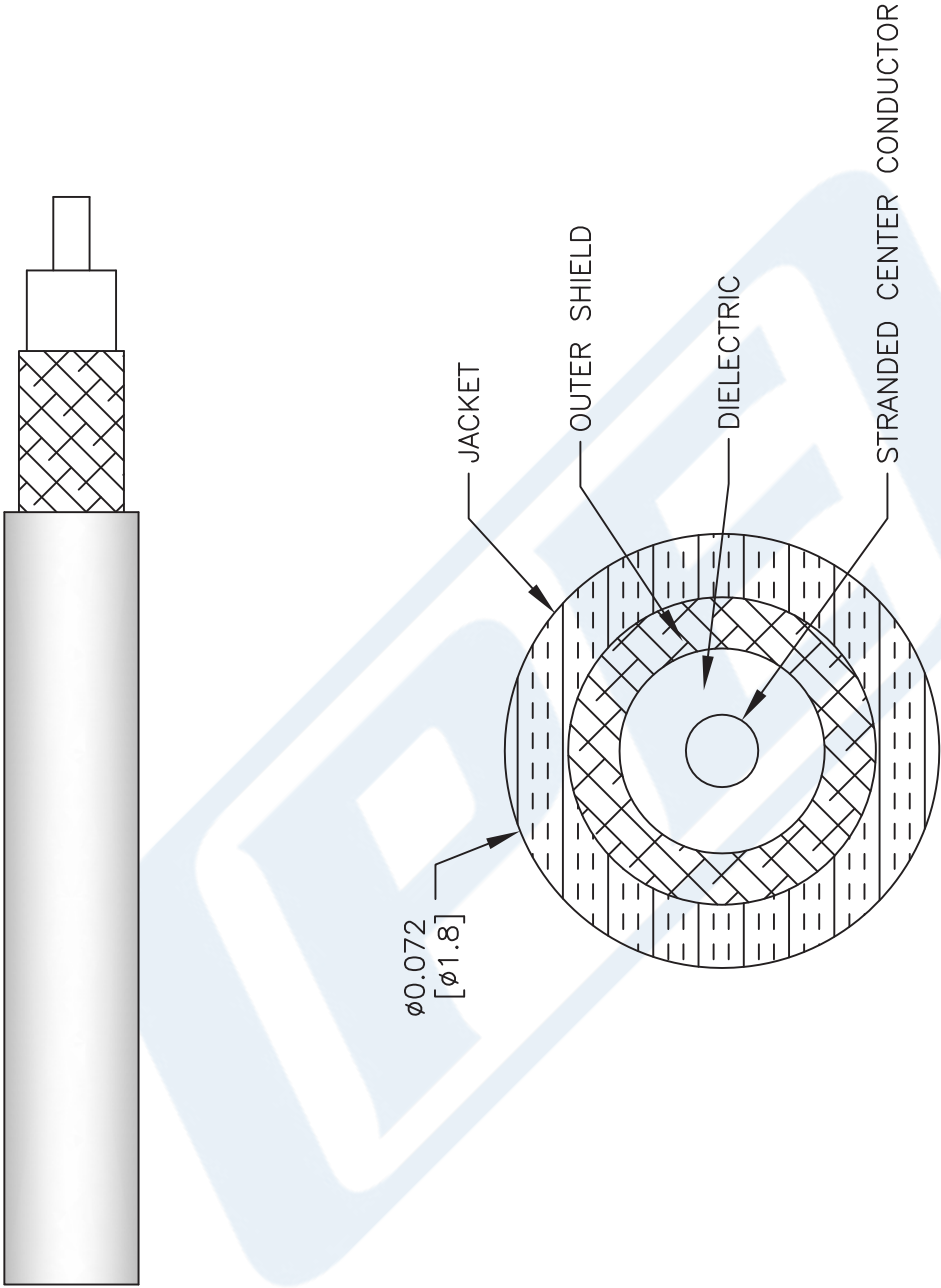
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

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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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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