



## SMA Female Connector Clamp/Solder Attachment For RG178, RG196

### TECHNICAL DATA SHEET

PE4591

#### SMA Female Connector Clamp/Solder Attachment For RG178, RG196

##### Configuration

Connector	SMA Female
Connector Specification	MIL-C-39012
Connector Interface Type	RG178, RG196
Cable Attachment Method (Shield/Contact)	Clamp/Solder
Body Style	Straight

##### Electrical Specifications

Impedance, Ohms	50
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##### Mechanical Specifications

###### Temperature

Operating Range, deg C	-65 to +165
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###### Size

Length, in [mm]	0.7 [17.78]
Width/Dia., in [mm]	0.312 [7.92]
Weight, lbs [g]	0.013 [5.9]

##### Connector

Type	SMA Female
Contact Material and Plating	Gold
Contact Plating Specification	MIL-G-45204
Body Material and Plating	Brass, Nickel
Dielectric Type	Teflon

##### Compliance Certifications (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

RoHS Compliant	Yes
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##### Plotted and Other Data

Notes:	Values at 25 °C, sea level
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SMA Female Connector Clamp/Solder Attachment For RG178, RG196 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

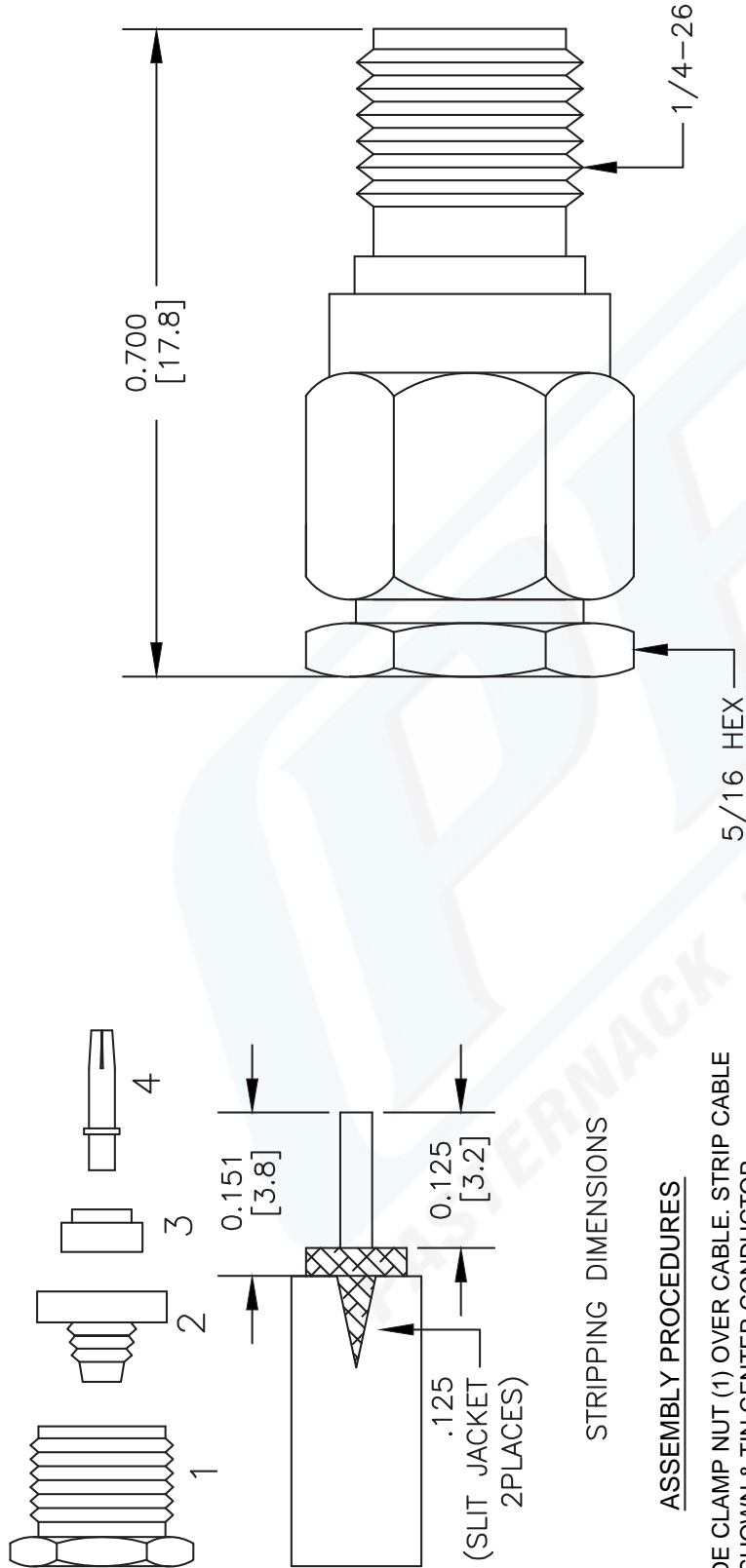
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Connector Clamp/Solder Attachment For RG178, RG196 PE4591](http://www.pasternack.com/sma-female-standard-rg178-rg196-connector-pe4591-p.aspx)

URL: <http://www.pasternack.com/sma-female-standard-rg178-rg196-connector-pe4591-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.

# PE4591 CAD Drawing

SMA Female Connector Clamp/Solder Attachment For RG178, RG196



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

SLIDE CLAMP NUT (1) OVER CABLE. STRIP CABLE AS SHOWN & TIN CENTER CONDUCTOR.

FLAIR BRAID & INSERT BRAID CLAMP (2) UNDER BRAID AND JACKET. SLIDE PTFE (3) OVER CENTER CONDUCTOR. CENTER CONDUCTOR.

SOLDER CONTACT (4) TO CENTER CONDUCTOR. INSTALL CABLE ASSEMBLY INTO BODY & TIGHTEN.



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DWG TITLE

**PE4591**

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.

FSCM NO. 53919

CAD FILE 052402

SCALE N/A

SIZE A

XXXX



## 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 MIL-DTL-45204
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Gold MIL-DTL-45204
Body	Brass	Gold 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**

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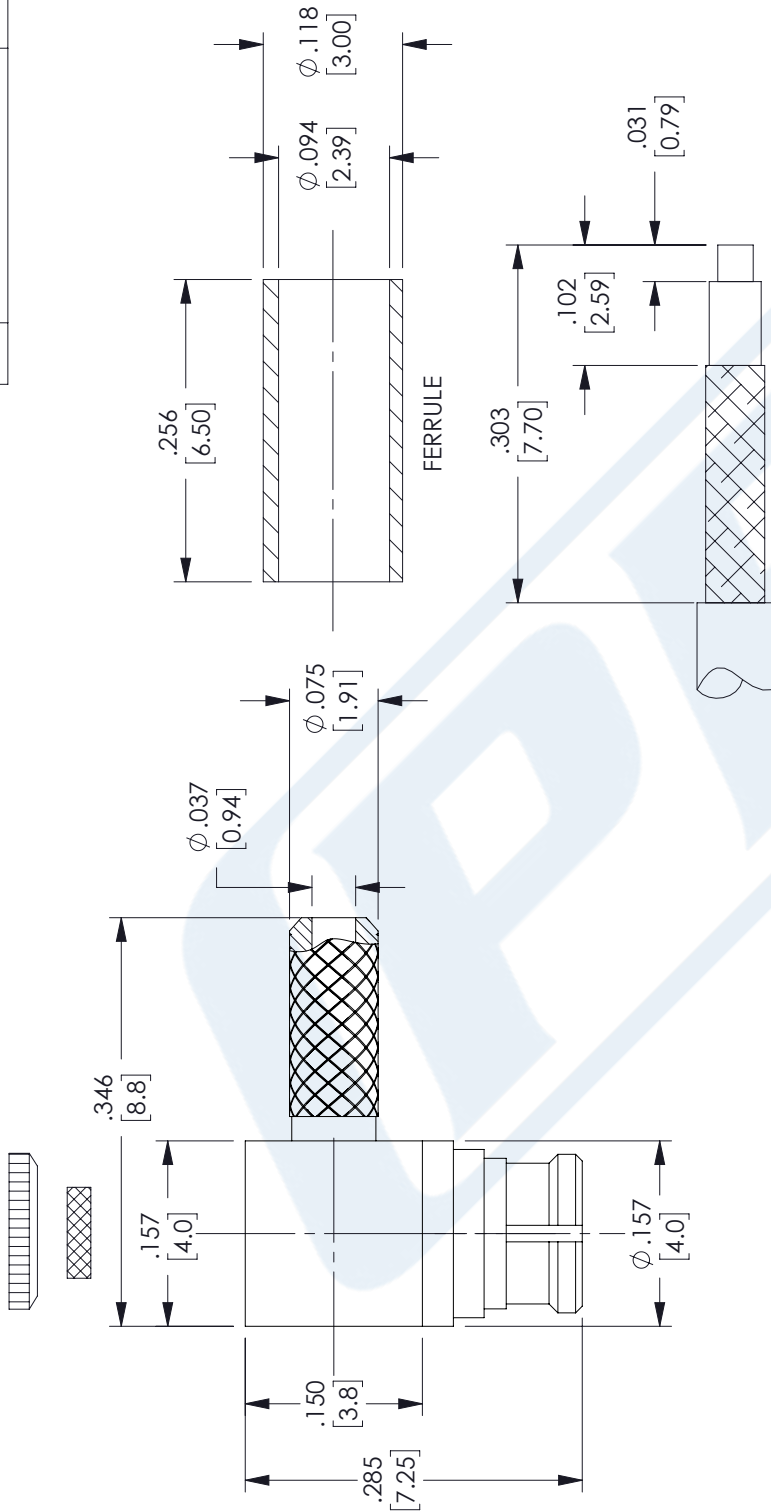
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# PE45290 CAD Drawing

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

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



## 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.

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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SHEET 1 OF 1

SCALE N/A

REV B

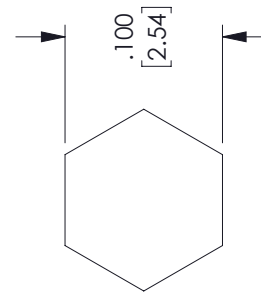


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SIZE A 53919 WZhang ITEM NO. PE45290

## CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL



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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]
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**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.

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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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