



## SMP Female Right Angle Connector Crimp/Crimp 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
- RG178, RG196 Interface Type
- Crimp/Crimp Attachment

#### 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/crimp 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.

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. 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.

#### 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/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



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

RF Connectors Technical Data Sheet

PE45290

Weight 0.0033 lbs [1.5 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

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/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)



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

### RF Connectors Technical Data Sheet

PE45290

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

#### Plotted and Other Data

Notes:

SMP Female Right Angle Connector Crimp/Crimp 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% availability and are part of the broadest selection in the industry.

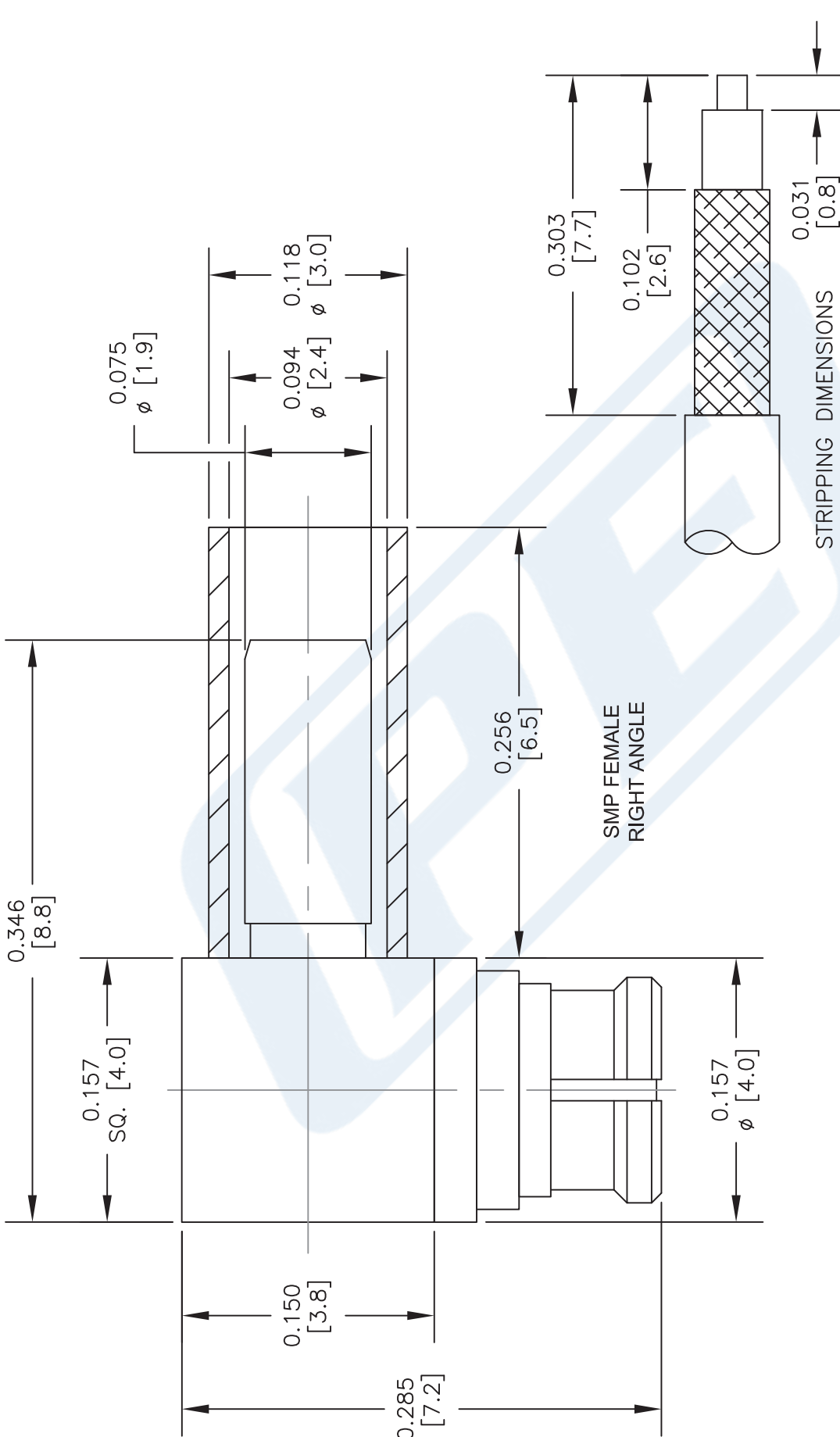
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle Connector Crimp/Crimp Attachment for RG178, RG196, Up To 8 GHz PE45290](#)

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.

# PE45290 CAD Drawing

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



**CRIMP SIZE REQUIRED**  
FERRULE: .100" HEX CRIMP TOOL

**STRIPPING DIMENSIONS**  
**ASSEMBLY PROCEDURES**

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

**STANDARD TOLERANCES**  
.X ±0.2  
.XX ±0.1  
.XXX ±0.05

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

**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.

DWG TITLE  
**PE45290**

CAGE CODE **53919**

CAD FILE 092216 SCALE N/A SIZE A 2233

**(PE) PASTERNAK®**  
THE ENGINEER'S RF SOURCE  
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## MCX Plug Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4552

#### Configuration

- MCX Plug Connector
- CECC 22220
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.35:1
- Gold Plated Brass Contact
- 30  $\mu$ m minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4552 MCX plug connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our MCX plug connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.35:1.

Our MCX plug connector PE4552 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			1.35:1	
Insertion Loss			0.4	dB
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
Inner Conductor DC Resistance			5	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	60			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE4552](#)



MCX Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4552

**Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 6				GHz
VSWR, Max	1.22:1	1.35:1				

**Mechanical Specifications**

**Size**

Length	0.619 in [15.72 mm]
Width/Dia.	0.195 in [4.95 mm]
Weight	0.005 lbs [2.27 g]
Mating Cycles	500 Cycles

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 2.5 µin minimum

**Environmental Specifications**

**Temperature**

Operating Range	-65 to +165 deg C
Vibration	MIL-STD-202, Method 204, Condition B
Temperature Cycle	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE4552](#)



## MCX Plug Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

PE4552

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

#### Plotted and Other Data

Notes:

MCX Plug 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% availability and are part of the broadest selection in the industry.

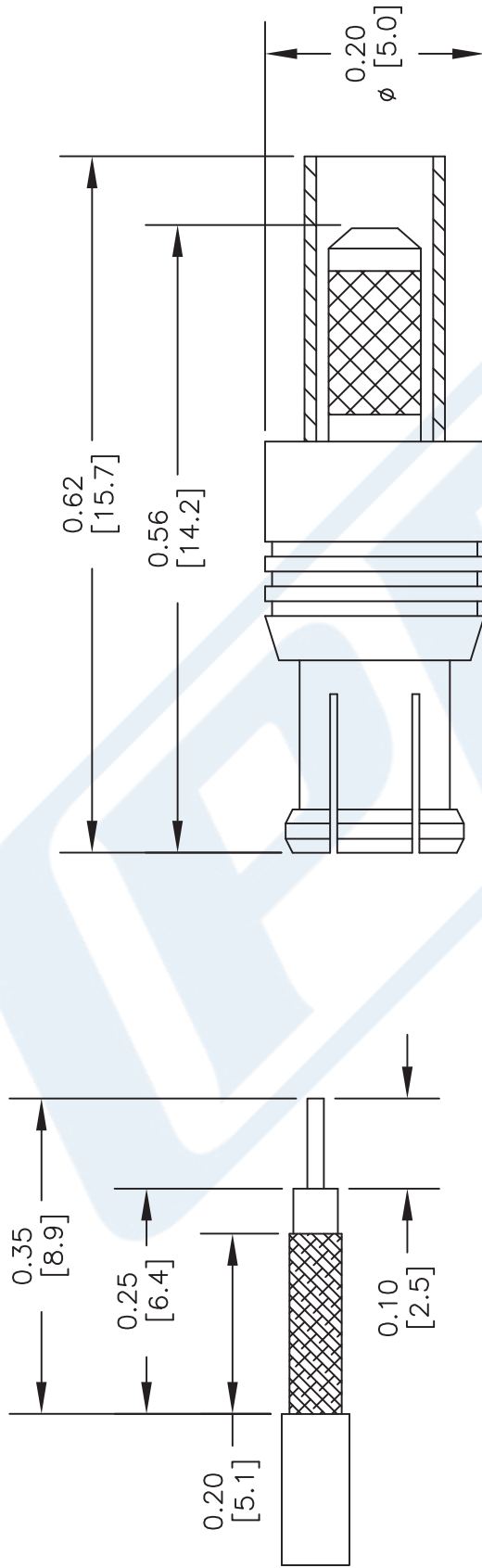
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE4552](#)

URL: <https://www.pasternack.com/mcx-plug-standard-rg178-rg196-connector-pe4552-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.

# PE4552 CAD Drawing

MCX Plug Connector Crimp/Solder Attachment for RG178, RG196



## STRIPPING DIMENSIONS

## CRIMP SIZE REQUIRED

CONTACT: SOLDER  
 FERRULE: .100" HEX CRIMP TOOL

### STANDARD TOLERANCES

.X ±0.008  
 .XX ±0.004  
 .XXX ±0.002

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



Pasternack Enterprises, Inc.  
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DWG TITLE

**PE4552**

FSCM NO. 53919

NOTES:  
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CAD FILE 040516

SCALE N/A

SIZE A

3045

# 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 dB/100m
	45.31	91.21	145.7	257.22		

### 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.

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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