



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

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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.

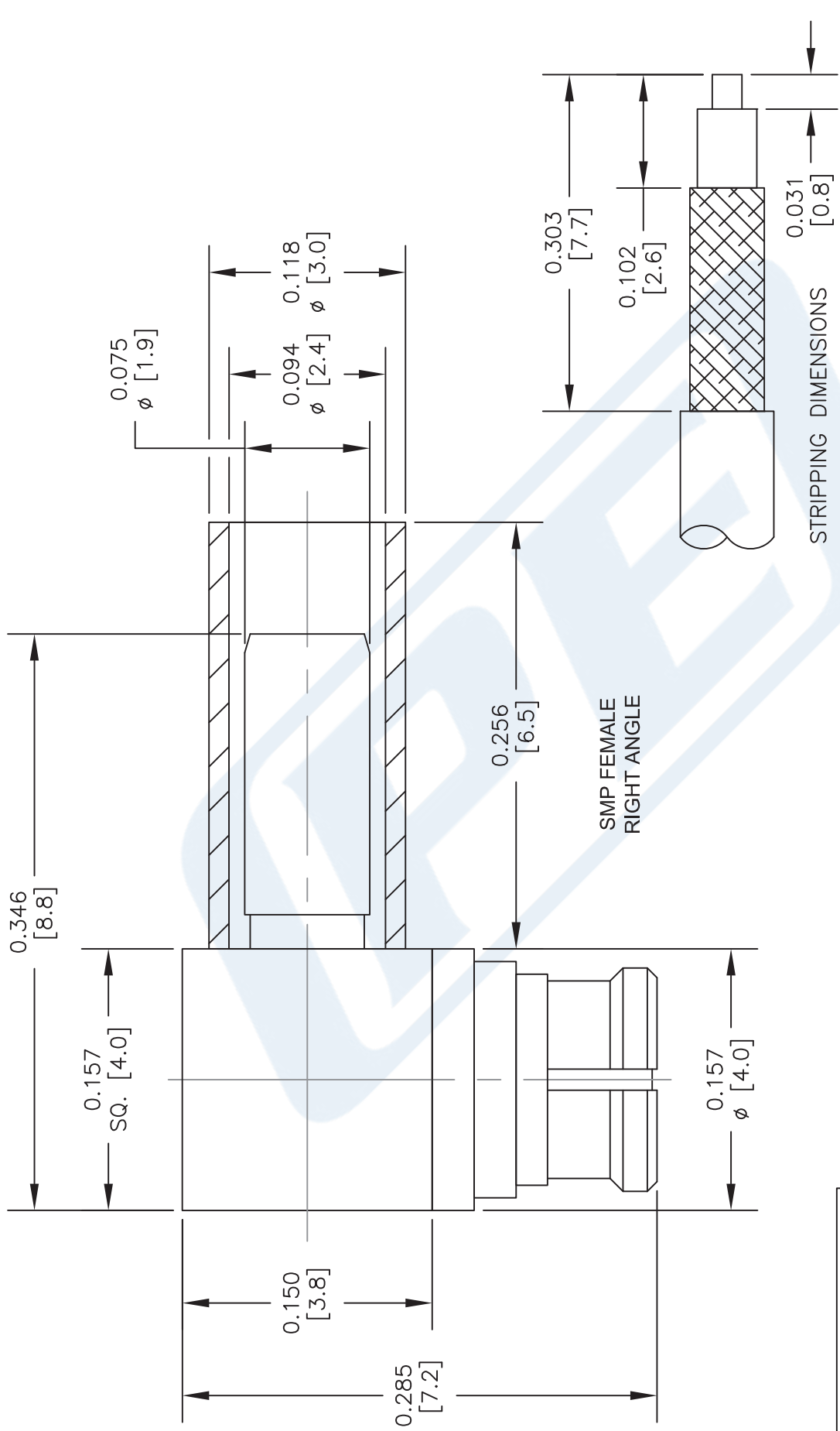
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URL: <https://www.pasternack.com/smp-female-rg178-rg196-connector-pe45290-p.aspx>

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



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

DWG TITLE

PE45290

CAGE CODE 53919

SCALE N/A

SIZE A

2233

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.

CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL

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.

STRIPPING DIMENSIONS

0.031 [0.8]

0.102 [2.6]

0.303 [7.7]

SMP FEMALE RIGHT ANGLE

0.256 [6.5]

0.157 ϕ [4.0]

0.285 [7.2]

0.150 [3.8]

0.157 SQ. [4.0]

0.346 [8.8]

0.075 ϕ [1.9]

0.094 ϕ [2.4]

0.118 ϕ [3.0]

PASTERNAK®
THE ENGINEER'S RF SOURCE
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RP MCX Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE44370

Configuration

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

Features

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

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44370 RP 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. The plug reverse polarity configuration uses a plug connector body with an inner contact receptacle. Our MCX plug connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.41:1.

Our reverse polarity MCX plug connector PE44370 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 at 4 and 7 MHz			500	Vrms
Corona Discharge 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: [RP MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE44370](#)



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

RF Connectors Technical Data Sheet

PE44370

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	0.598 in [15.19 mm]
Width/Dia.	0.196 in [4.98 mm]
Weight	0.004 lbs [1.81 g]
Mating Cycles	500 Cycles

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold over Nickel 30 µin minimum
Insulation	PTFE	
Body	Brass	Gold over Nickel 10 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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE44370](#)



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

RF Connectors Technical Data Sheet

PE44370

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

Plotted and Other Data

Notes:

RP 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.

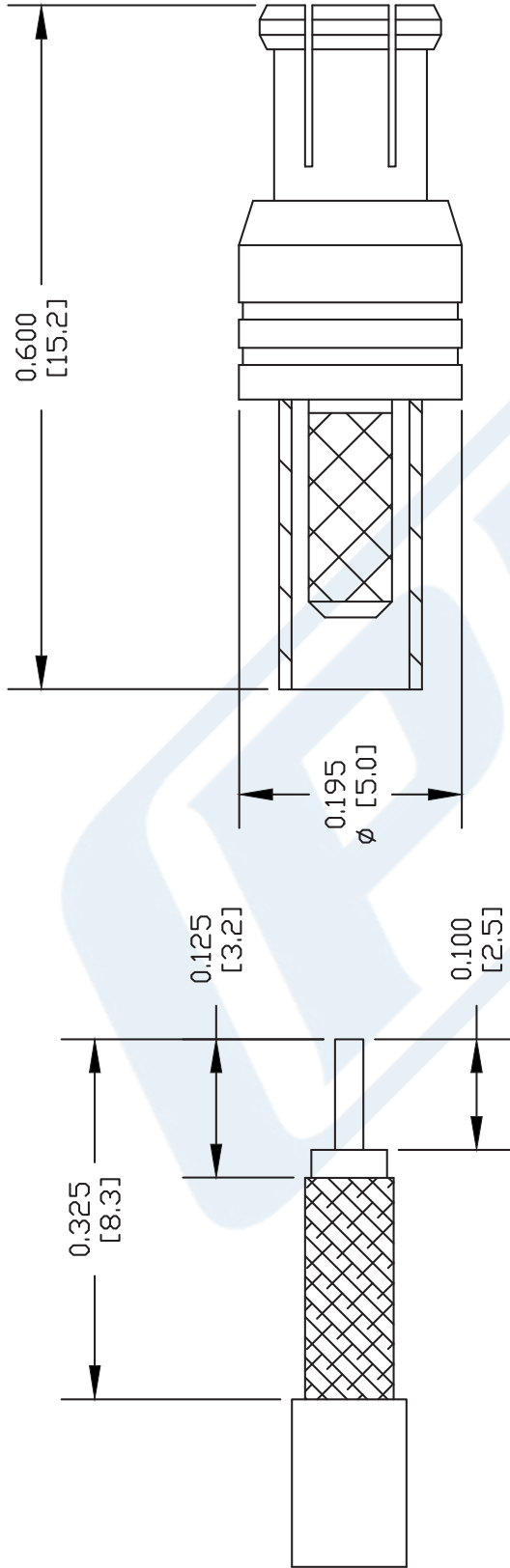
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [RP MCX Plug Connector Crimp/Solder Attachment for RG178, RG196 PE44370](#)

URL: <https://www.pasternack.com/mcx-plug-reverse-polarity-rg178-rg196-connector-pe44370-p.aspx>

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PE44370 CAD Drawing

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



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER
 FERRULE: .100" HEX CRIMP TOOL

NOTES:
 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
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 3. DIMENSIONS ARE IN INCHES [mm].
 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

DWG TITLE
PE44370

FSCM NO. 53919

127

SIZE A

SCALE N/A

CAD FILE 080103

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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.

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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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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