



SMP Female Connector Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE44841

Configuration

- SMP Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Solder/Solder Attachment

Features

- Max. Operating Frequency 6 GHz
- Excellent VSWR of 1.2:1
- Gold Plated Beryllium Copper Contact
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44841 SMP female connector with solder/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 6 GHz and offers excellent VSWR of 1.2:1. 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.

Our SMP female connector PE44841 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			1.2:1	
Operating Voltage (AC)			335	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms
Inner Conductor DC Resistance			6	mOhms
Outer Conductor DC Resistance			2	mOhms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:

Insertion loss: $0.12 \times \sqrt{f(\text{GHz})}$ dB.

RF leakage: 80 dB (DC to 3 GHz), 65 dB (3 to 6 GHz).

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Connector Solder Attachment for RG178, RG196 PE44841](#)



SMP Female Connector Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE44841

Mechanical Specifications

Size	
Length	0.262 in [6.65 mm]
Weight	0.001 lbs [0.45 g]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold
Insulation	PTFE	
Body	Beryllium Copper	Gold

Mechanical Specification Notes:
Minimum mating cycles: 1,000 (smooth bore), 500 (limited detent), 100 (full detent).

Environmental Specifications

Temperature	
Operating Range	-65 to +165 deg C

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

Plotted and Other Data

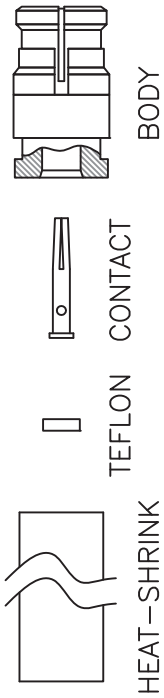
Notes:

SMP Female Connector 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: [SMP Female Connector Solder Attachment for RG178, RG196 PE44841](#)

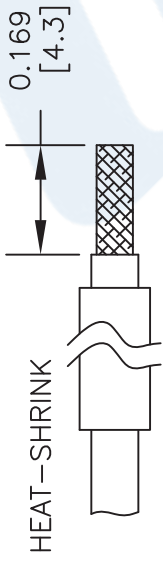
URL: <https://www.pasternack.com/smp-female-standard-rg178-rg196-connector-pe44841-p.aspx>

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.

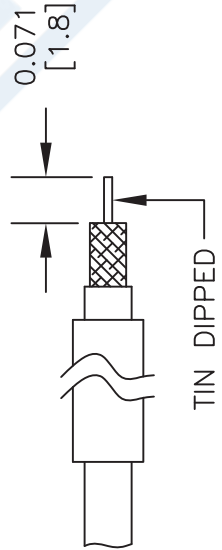


ASSEMBLY PROCEDURES

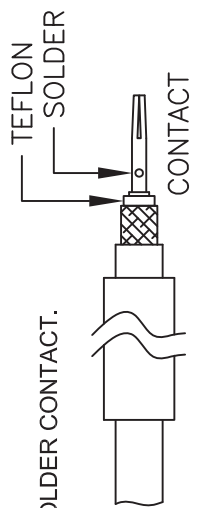
1. INSERT HEAT SHRINK TUBE ON CABLE; STRIP CABLE TO DIMENSION SHOWN. DIP END OF CABLE INTO FLUX AND THEN TIN BRAID.



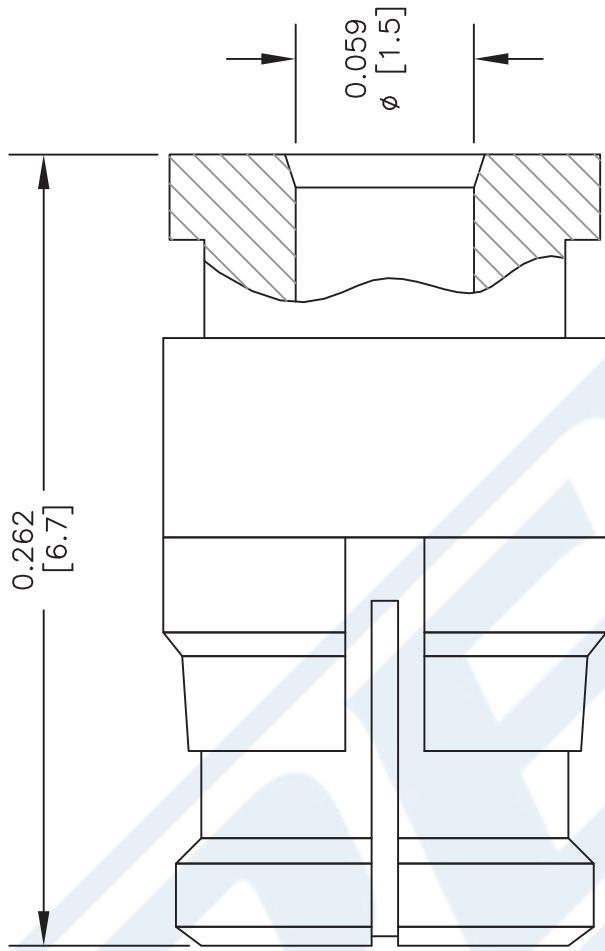
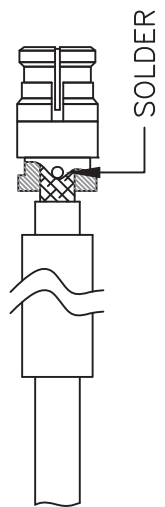
2. AFTER PRE TINNING, TRIM TO DIMENSION SHOWN TO EXPOSE THE CENTER CONDUCTOR.



3. SOFT SOLDER CONTACT.



4. INSTALL CABLE INTO BODY AND SOLDER CABLE TO BODY AS SHOWN, SLIDE HEAT-SHRINK TUBE TOWARDS BODY SHOULDER AND SHRINK TO FIT.



DWG TITLE

PE44841

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.

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FSCM NO. 53919

CAD FILE 012114

SCALE N/A

SIZE A

2233



BNC Male Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4643

Configuration

- BNC Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 1,000 MHz
- Good VSWR of 1.35:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4643 BNC 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 BNC male connector operates up to a maximum frequency of 1,000 MHz and offers good VSWR of 1.35:1.

Our BNC male connector PE4643 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			1.35:1	
Operating Voltage (AC)			500	Vrms

Mechanical Specifications**Size**

Length	1.39 in [35.31 mm]
Width/Dia.	0.57 in [14.48 mm]
Weight	0.034 lbs [15.42 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male Connector Crimp/Solder Attachment for RG178, RG196 PE4643](#)



BNC Male Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4643

Material Specifications

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Nickel 100 µin minimum

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

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

Plotted and Other Data

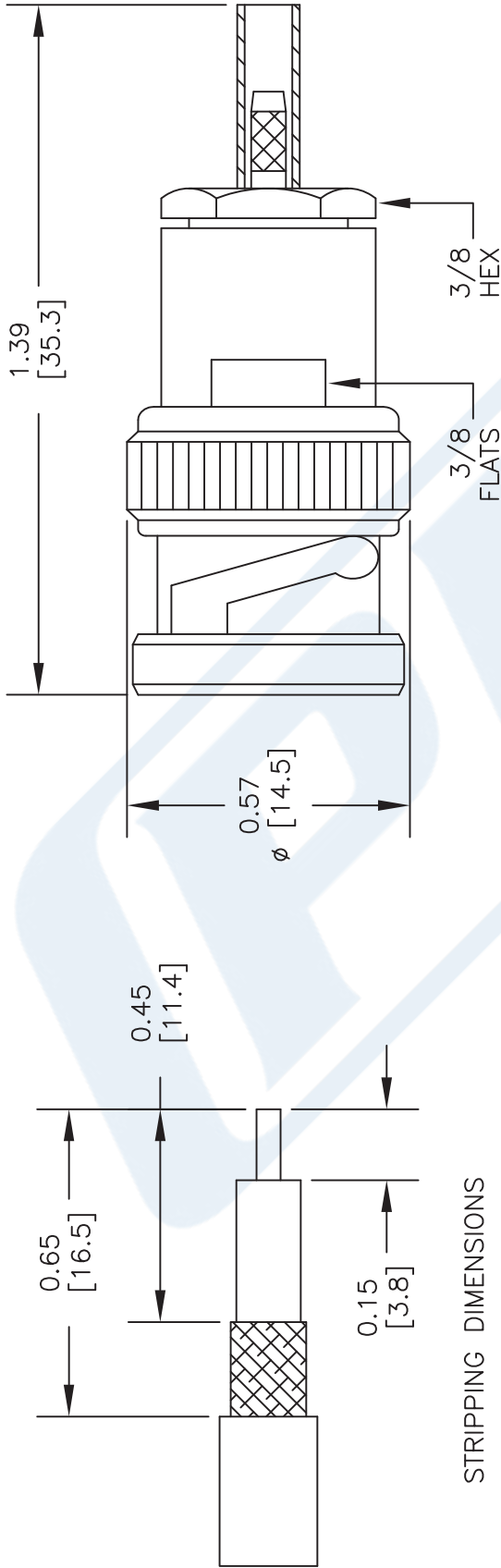
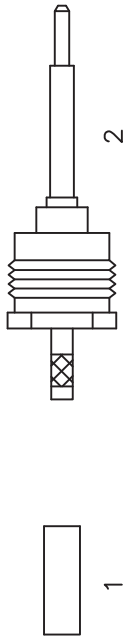
Notes:

BNC 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% 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: [BNC Male Connector Crimp/Solder Attachment for RG178, RG196 PE4643](#)

URL: <https://www.pasternack.com/bnc-male-standard-rg178-rg196-connector-pe4643-p.aspx>

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STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE (1) ONTO CABLE. TIN CENTER CONDUCTOR.
2. ADD EXTENSION (2) BY SLIDING EXTENSION BETWEEN BRAID & DIELECTRIC. SLIDE FERRULE (1) OVER BRAID & CRIMP.
3. SOLDER CENTER CONDUCTOR THROUGH HOLE IN CONTACT. SLIDE ASSEMBLY INTO BODY & TIGHTEN.

CRIMP SIZE REQUIRED

FERRULE: .100" HEX CRIMP TOOL



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DWG TITLE

PE4643

FSCM NO. 53919

CAD FILE 012014

SCALE N/A

SIZE A

2233

NOTES:
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3. DIMENSIONS ARE IN INCHES [mm].
4. FITS MIL-C-17 AND EQUIVALENT CABLES.

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.

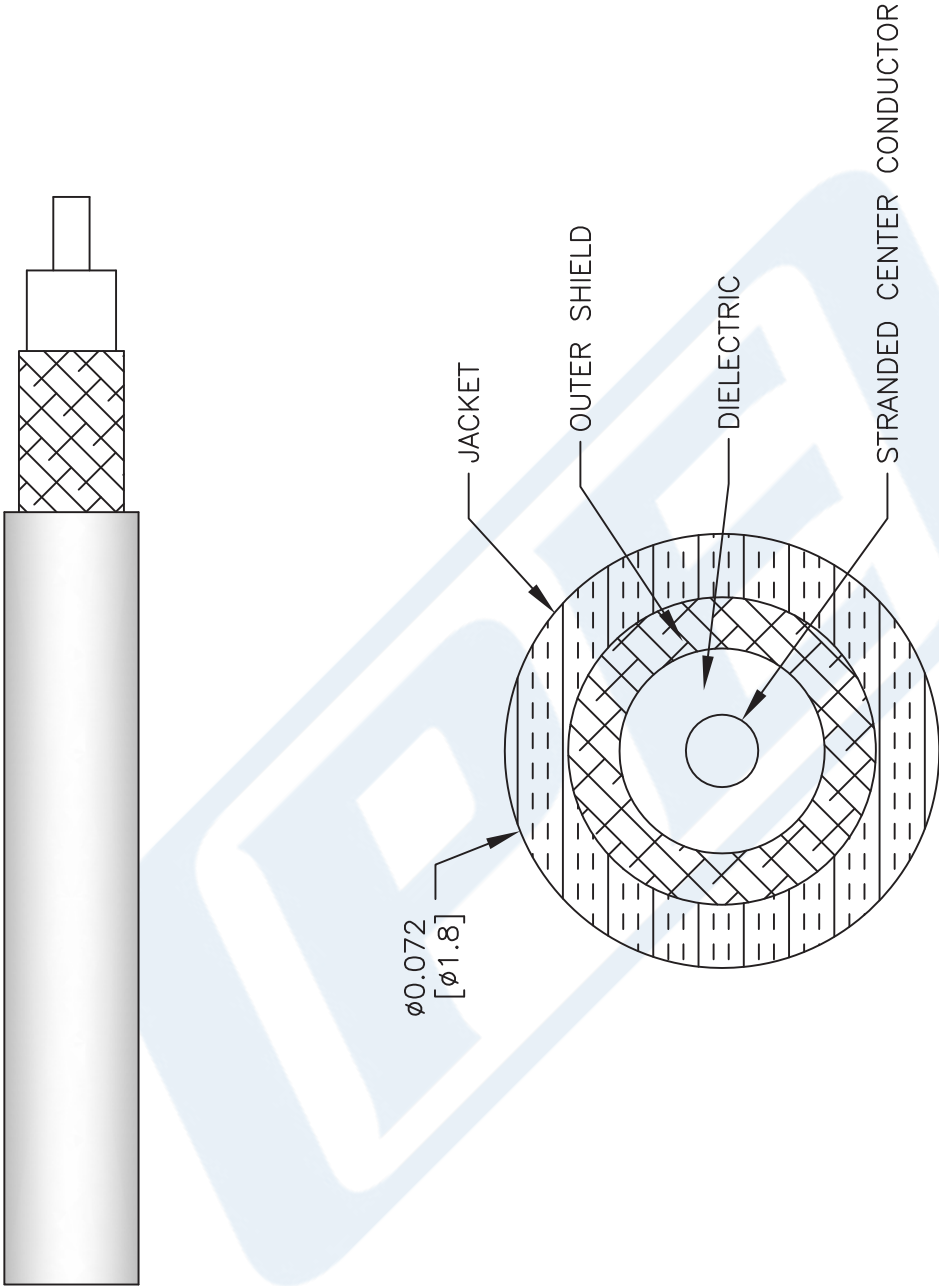
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket RG178B/U](#)

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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DWG TITLE
RG178B/U

CAGE CODE 53919

2233

SIZE A

SCALE N/A

CAD FILE 062117

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