PASTERNACK®
THE ENGINEER'S RF SOURCE



SMP Female Connector Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet PE44655

Configuration

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

Features

- Max. Operating Frequency 3 GHz
- Excellent VSWR of 1.25:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Blind Mate Connector

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44655 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 3 GHz and offers excellent VSWR of 1.25:1. 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 PE44655 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		3	GHz
VSWR			1.25:1	

Mechanical Specifications

Size

Length	0.25 in [6.35 mm]
Width/Dia.	0.135 in [3.43 mm]
Weight	0.003 lbs [1.36 g]

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 PE44655

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Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
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SMP Female Connector Solder Attachment for RG178, RG196

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	PTFE	
Body	Beryllium Copper	Gold MIL-G-45204

Environmental Specifications

Temperature

Operating Range -55 to +125 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 PE44655

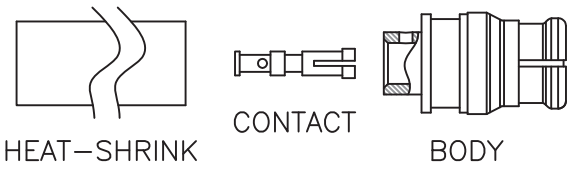
URL: https://www.pasternack.com/smp-female-standard-rg178-rg196-connector-pe44655-p.aspx

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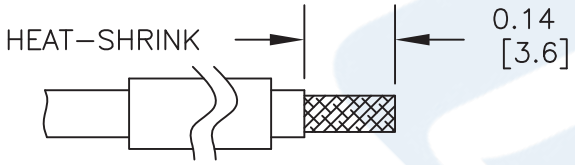
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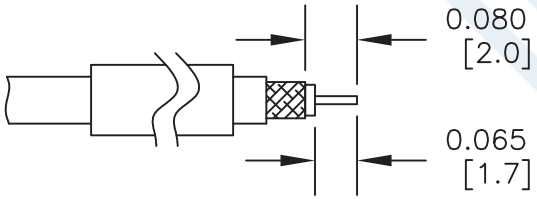


ASSEMBLY PROCEDURES

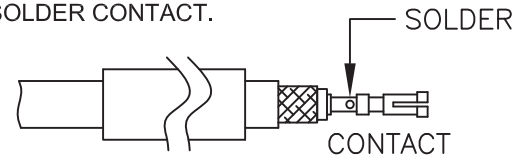
1. INSERT HEAT SHRINK TUBE ON CABLE, STRIP CABLE TO DIMENSION SHOWN. DIP END OF CABLE INTO FLUX AND THEN TIN BRAID.



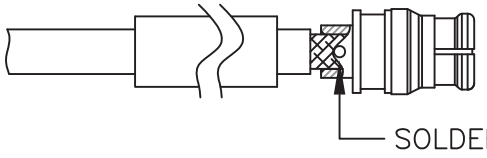
2. AFTER PRE TINNING TRIM TO DIMENSION SHOWN.

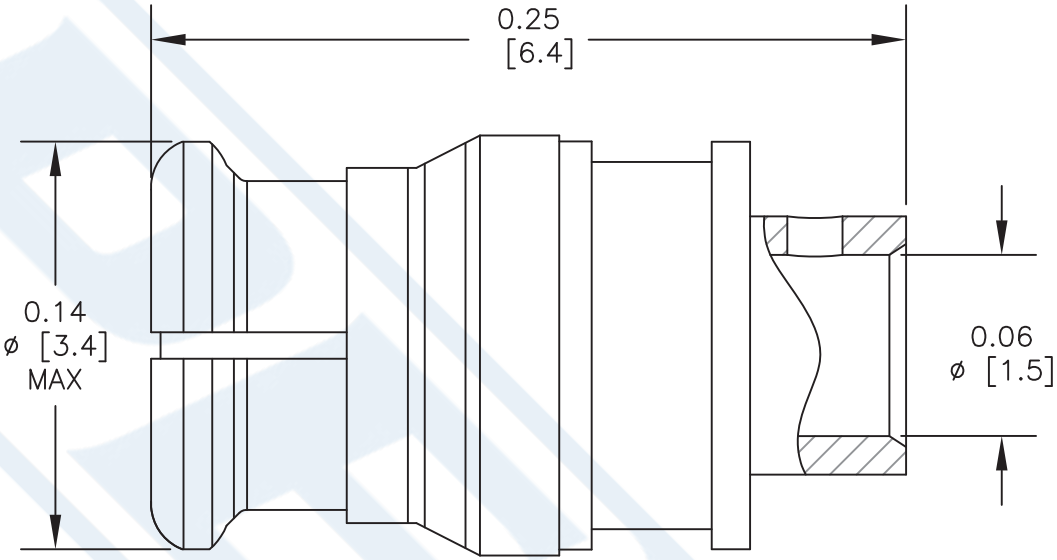


3. SOFT SOLDER CONTACT.



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





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Website: www.pasternack.com | **E-Mail:** sales@pasternack.com

DWG TITLE

PE44655

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 071113	SCALE N/A	SIZE A	2233

PE44655 CAD Drawing
SMP Female Connector Solder Attachment for RG178, RG196

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SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors
Technical Data Sheet

PE45496

Configuration

- SSMC Plug Connector
- 50 Ohms
- Right Angle Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.57:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling
- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics
- A/D Modules
- Data Acquisition
- Software defined radio (SDR)
- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

Description

Pasternack's PE45496 SSMC plug 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 SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.57:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SSMC plug right angle connector PE45496 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		12.4	GHz
VSWR			1.57:1	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE45496

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SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors
Technical Data Sheet

PE45496

Mechanical Specifications

Size

Length	0.421 in [10.69 mm]
Width/Dia.	0.156 in [3.96 mm]
Height	0.33 in [8.38 mm]
Mating Cycles	500 Cycles
Mating Torque	1.75 to 2 in-lbs [0.20 to 0.23 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	Teflon	
Body	Brass	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45204
Crimp Sleeve	Brass	Gold MIL-G-45204

Environmental Specifications

Temperature

Operating Range	-65 to +165 deg C
Shock	Method 213, Condition B, 75G @6ms @1/2 sine
Vibration	Method 204, Condition D (20G)
Salt Spray	Method 101, Condition B, 5% salt solution

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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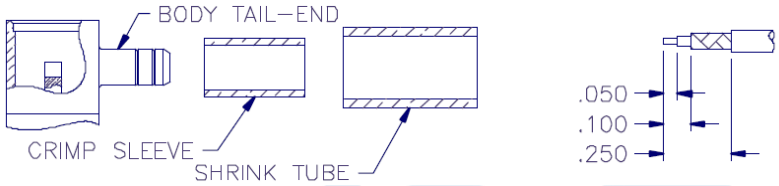
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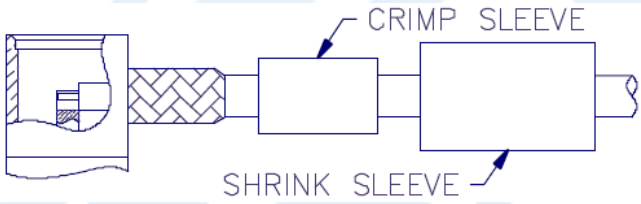
SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

Assembly Instruction

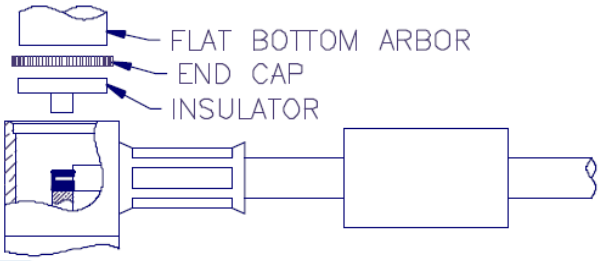
Assembly Instructions



1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE **(IF SUPPLIED)** OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE ASSEMBLY INTO BODY TAIL-END MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF BODY.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP SLEEVE TO BRAID.



6. SOLDER CENTER CONDUCTOR OF CABLE TO CONTACT.
7. PLACE INSULATOR AND END CAP INTO CONNECTOR BODY AS SHOWN AND USE A .185" DIAMETER FLAT BOTTOM PUNCH TO PRESS CAP IN PLACE. CAP MUST BE BELOW SURFACE TO SEAT PROPERLY.
8. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

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SSMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors
Technical Data Sheet

PE45496

SSMC Plug Right Angle 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 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45496-p.aspx

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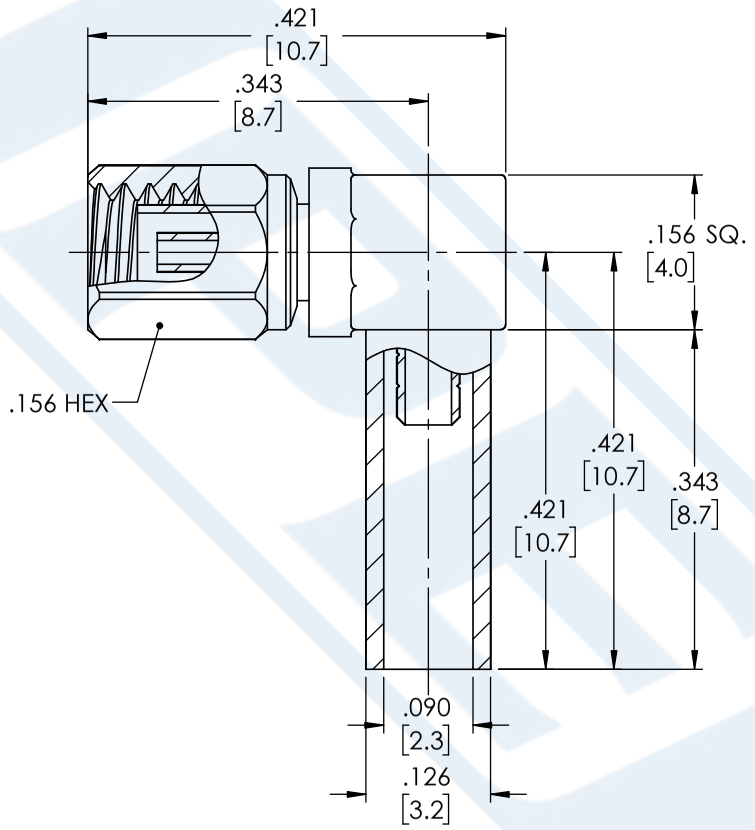
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PE45496 CAD Drawing

SSMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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DWG TITLE: PE45496

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3. DIMENSIONS ARE IN INCHES [mm].

CAGE CODE 53919	CAD FILE 08/13/18	SCALE N/A	SIZE A	CN2245

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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

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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

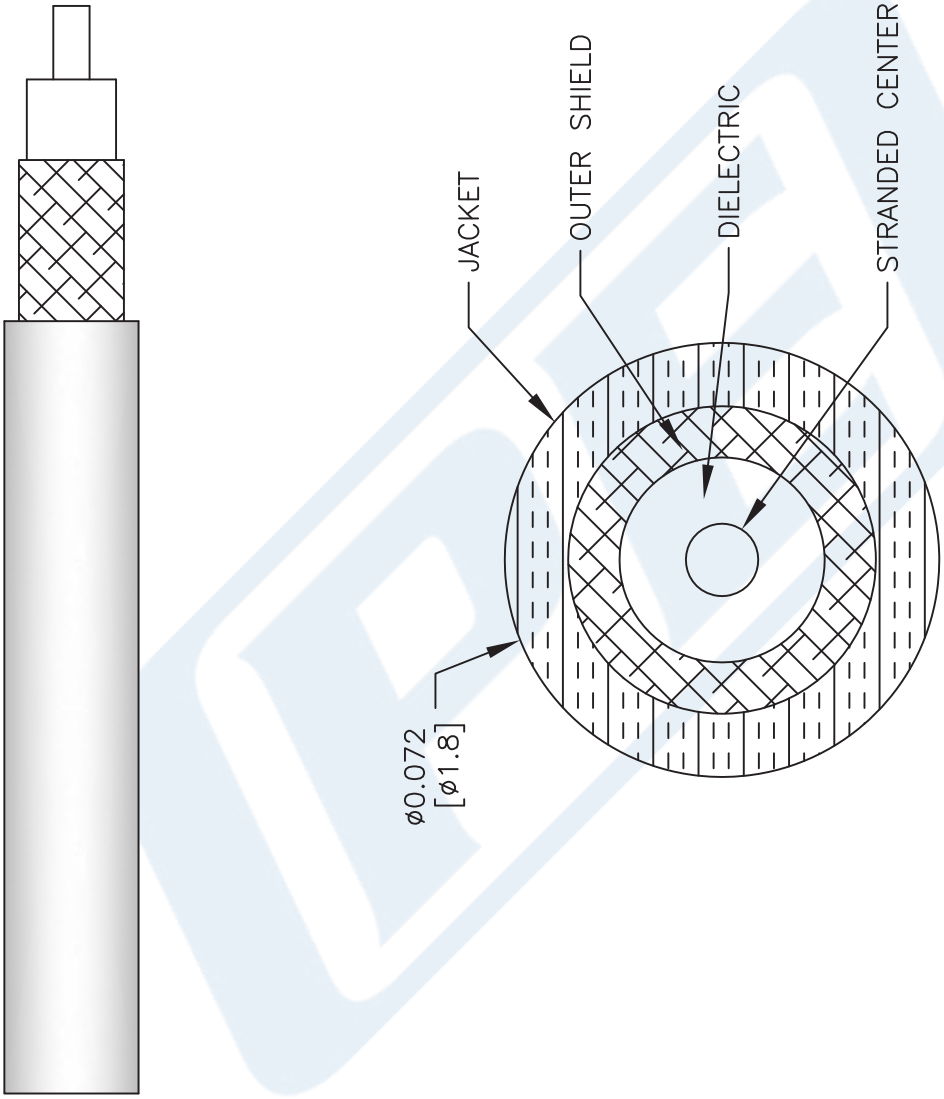
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RG178B/U CAD Drawing

Flexible RG178 Coax Cable Single Shielded with Tan FEP Jacket



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DWG TITLE: RG178B/U

CAD FILE 062117 | SCALE N/A | SIZE A | 2233

CAGE CODE 53919

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