



SMB Jack Connector Clamp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4269

Configuration

- SMB Jack Connector
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Clamp/Solder Attachment

Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.46:1
- Gold Plated Brass Contact
- Contact plating according to MIL-PRF-39012

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4269 SMB jack connector with clamp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMB jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.46:1.

Our SMB jack connector PE4269 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		4	GHz
VSWR			1.46:1	
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			750	Vrms
High Potential Voltage at 5 MHz			400	Vrms
Corona Discharge at 70,000 feet			125	Vrms

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Jack Connector Clamp/Solder Attachment for RG178, RG196 PE4269](#)



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Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 1.5					GHz
Insertion Loss, Max	0.3					dB

Electrical Specification Notes:
RF leakage: 55 dB min at 2 to 3 GHz.

Mechanical Specifications

Size

Length	0.65 in [16.51 mm]
Width/Dia.	0.22 in [5.59 mm]
Weight	0.005 lbs [2.27 g]
Mating Cycles	500 Cycles

Material Specifications

Description	Material	Plating
Contact	Brass	Gold MIL-PRF-39012
Insulation	PTFE	
Body	Brass	Nickel MIL-PRF-39012

Environmental Specifications

Temperature

Operating Range	-65 to +165 deg C
Shock	MIL-STD-202, Method 213, Condition B
Vibration	MIL-STD-202, Method 204, Condition B
Thermal Shock	MIL-STD-202, Method 107, Condition B
Salt Spray	MIL-STD-202, Method 101, Condition B, 5% salt solution

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SMB Jack Connector Clamp/Solder
Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4269

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

Plotted and Other Data

Notes:

SMB Jack Connector Clamp/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: [SMB Jack Connector Clamp/Solder Attachment for RG178, RG196 PE4269](#)

URL: <https://www.pasternack.com/smb-jack-standard-rg178-rg196-connector-pe4269-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.

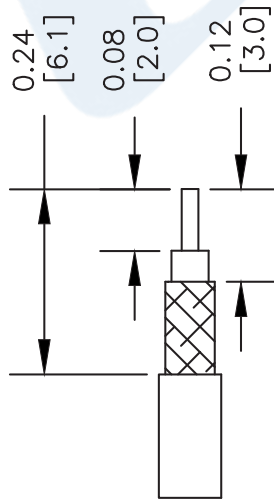
PE4269 CAD Drawing

SMB Jack Connector Clamp/Solder Attachment for RG178, RG196

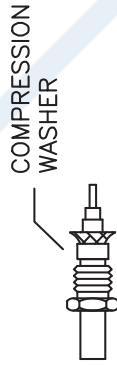


ASSEMBLY PROCEDURES

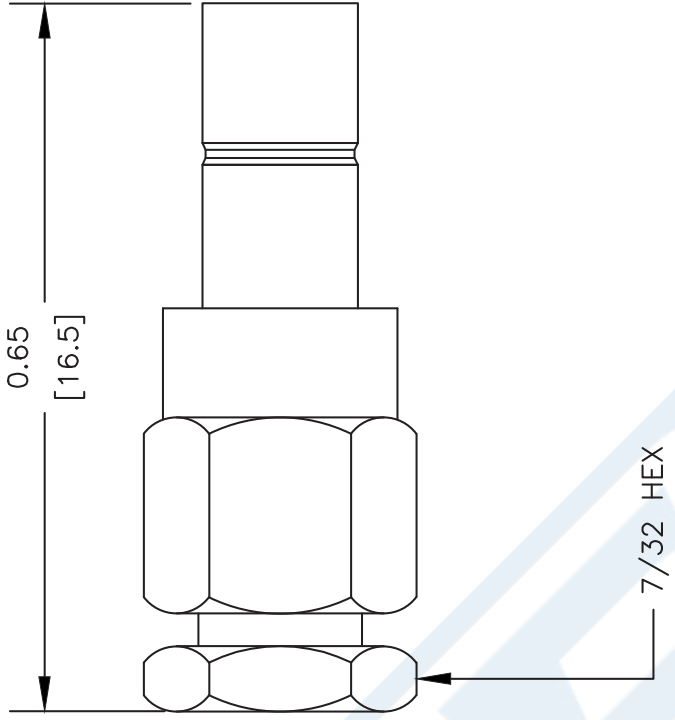
1. TRIM CABLE AS SHOWN. TIN CENTER CONDUCTOR. SLIDE NUT ONTO CABLE.



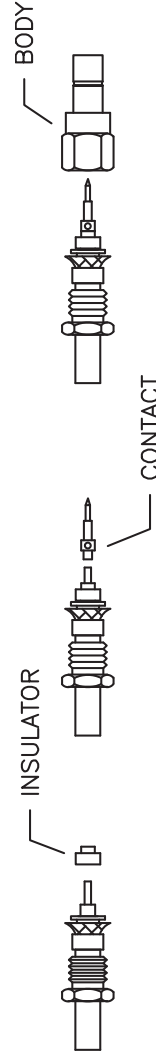
2. SLIDE COMPRESSION WASHER OVER THE BRAID UNTIL IT BOTTOMS OUT ON THE CABLE JACKET. FAN OUT BRAID RADIALLY AGAINST THE COMPRESSION WASHER BY ROTATING THE CABLE DIELECTRIC.



3. SLIDE FERRULE ONTO CABLE, OVER DIELECTRIC AND UNDER BRAID. PUSH INTO WASHER UNTIL IT STOPS. IF NECESSARY TRIM EXCESS BRAID FLUSH WITH SURFACE OF COMPRESSION WASHER AND FLANGE OF FERRULE.



4. INSTALL SMALL INSULATOR OVER CABLE DIELECTRIC. SOLDER CONTACT TO CENTER CONDUCTOR. INSERT CABLE ASSEMBLY INTO BODY AND TIGHTEN.



Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
 Phone: (949) 261-1920 | Fax: (949) 261-7451
 Website: www.pasternack.com | E-Mail: sales@pasternack.com

DWG TITLE

PE4269

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.

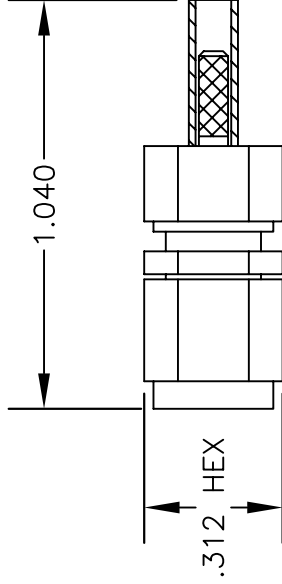
REV. A FSCM NO. 53919 CAD FILE 090808 SCALE N/A

SIZE A

2233

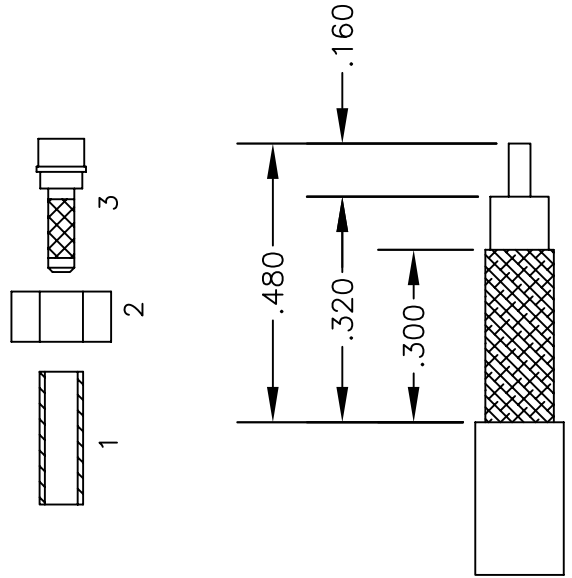
MATERIALS

BODY	BRASS NICKEL PLATED
CONTACT	GOLD PLATED
INSULATOR	PTFE
FERRULE	GOLD PLATED



ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE (1), HEAT SHRINK & CLAMP NUT (2) OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY (3) UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE (1) OVER BRAID & AGAINST CLAMP NUT. SOLDER FERRULE TO BRAID.
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



STRIPPING DIMENSIONS



PASTERNAK ENTERPRISES, INC.
 P.O. BOX 16759, IRVINE, CA 92623
 PHONE (949) 261-1920 FAX (949) 261-7451
 WEB ADDRESS: www.pasternack.com
 E-MAIL ADDRESS: sales@pasternack.com
COAXIAL & FIBER OPTICS

DWG TITLE
PE4213

DES. SMA MALE SOLDER ATTACHMENT FOR
 RG178 & RG196

REV. -	FSCM NO. 53919	CAD FILE	042309	SCALE	N/A	SIZE	A	147
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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 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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3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
RG178B/U

CAGE CODE **53919**

CAD FILE 062117

SCALE N/A

SIZE A

2233

PE PASTERNAK
THE ENGINEER'S RF SOURCE
Pasternack Enterprises, Inc.
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

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