



SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45490

Configuration

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

Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.44:1
- 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 PE45490 SSMC 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 SSMC plug connector operates up to a maximum frequency of 12.4 GHz and offers good VSWR of 1.44:1.

Our SSMC plug connector PE45490 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			1.44:1	
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 Connector Crimp/Solder Attachment for RG178, RG196 PE45490](#)



SSMC Plug Connector Crimp/Solder
Attachment for RG178, RG196

RF Connectors
Technical Data Sheet

PE45490

Mechanical Specifications

Size

Length

0.7 in [17.78 mm]

Width/Dia.

0.156 in [3.96 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	Beryllium Copper	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45205
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:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](#)



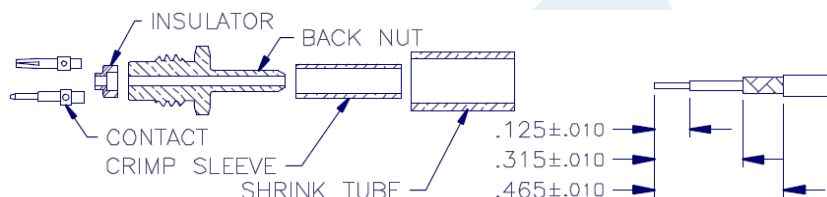
SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

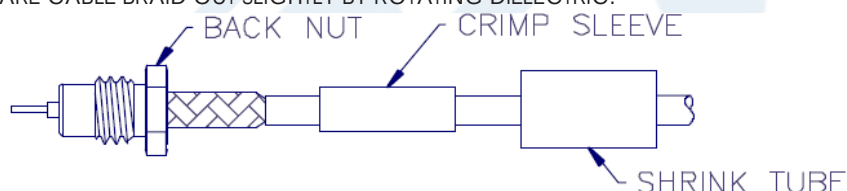
PE45490

Assembly Instruction

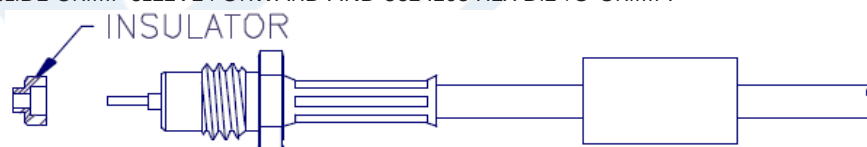
Assembly Instructions



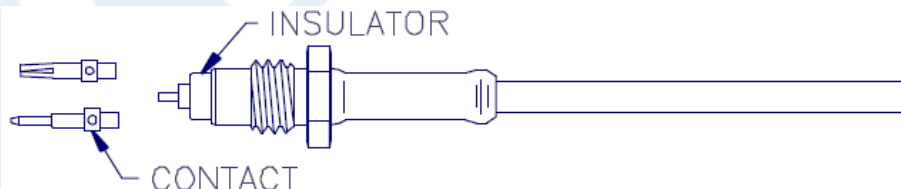
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



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



6. POSITION INSULATOR OVER CABLE DIELECTIC AND CENTER CONDUCTOR.



7. SOLDER CONTACT TO CENTER CONDUCTOR.
8. INSERT CABLE ASSEMBLY INTO BODY AND TIGHTEN NUT WITH A TORQUE WRENCH WITH A TORQUE OF 35-45 INCH-OUNCES.
9. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](#)



SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE45490

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

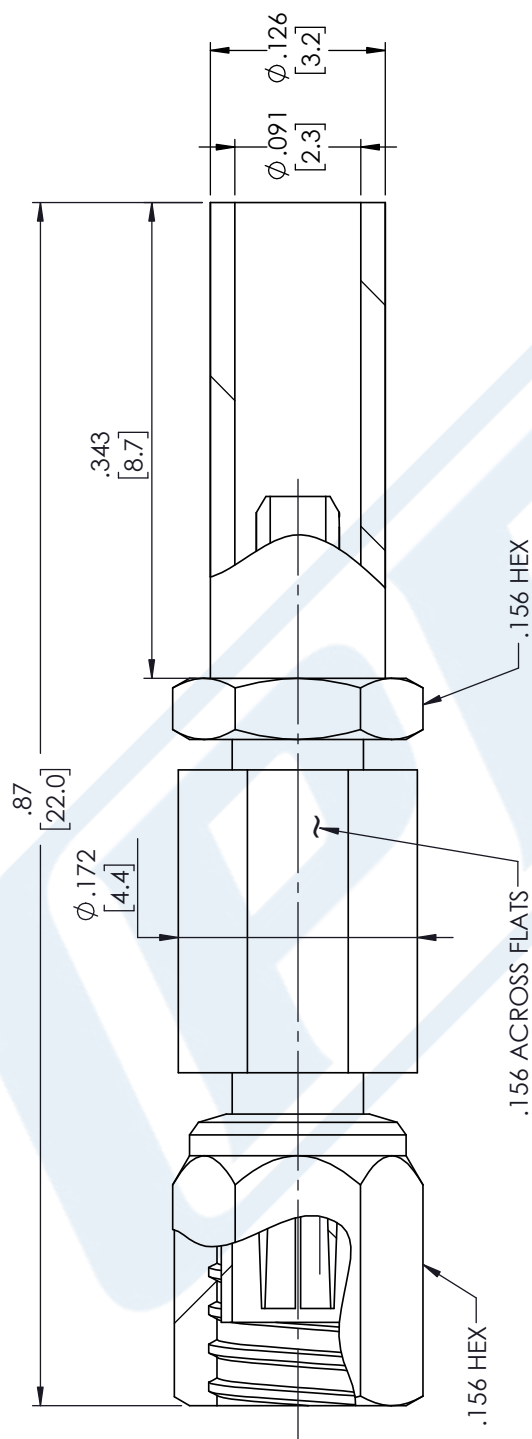
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45490-p.aspx)

URL: <https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45490-p.aspx>

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SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196



.X	±0.2
.XX	±0.01
.XXX	±0.005

***STANDARD TOLERANCES APPLY
ONLY TO DIMENSIONS IN INCHES**



PASTERNAK®
THE ENGINEER'S RF SOURCE

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DWG TITLE

PE45490

CAGE CODE 53919

CAD FILE 052217

SCALE N/A

SIZE A

CN2245

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].



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .235 inch D Hole

RF Connectors Technical Data Sheet

PE4422

Configuration

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

Features

- Gold Plated Contact
- Contact plating according to MIL-G-45204

Applications

- General Purpose Test
- Rack and Panel Mount Applications
- Custom Cable Assemblies

Description

Pasternack's PE4422 SMA female bulkhead connector with crimp/solder attachment for RG178 and RG196 (.235 inch D hole) is part of our full line of RF components available for same-day shipping. This SMA bulkhead connector allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

Our SMA female bulkhead connector PE4422 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.

Mechanical Specifications

Size

Length	1.25 in [31.75 mm]
Width/Dia.	0.312 in [7.92 mm]
Weight	0.013 lbs [5.9 g]

Material Specifications

Description	Material	Plating
Contact		Gold MIL-G-45204
Insulation	PTFE	
Body	Brass	Nickel QQ-N-290

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .235 inch D Hole PE4422](#)



SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .235 inch D Hole

RF Connectors Technical Data Sheet

PE4422

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

Plotted and Other Data

Notes:

SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .235 inch D Hole 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.

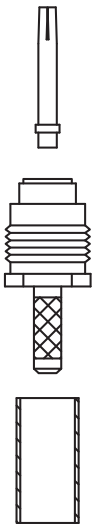
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead Mount Connector Crimp/Solder Attachment for RG178, RG196, .235 inch D Hole PE4422](#)

URL: <https://www.pasternack.com/sma-female-standard-rg178-rg196-connector-pe4422-p.aspx>

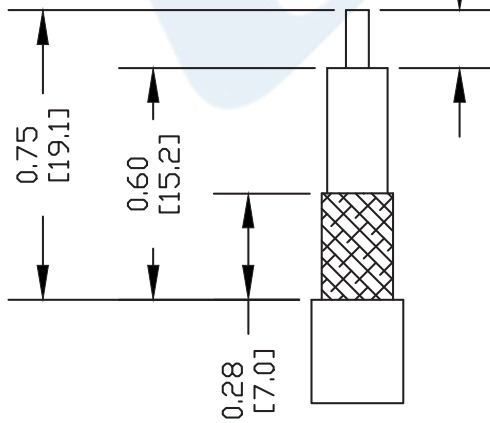
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PE4422 CAD Drawing

SMA Female Bulkhead Mount Connector Crimp/Solder
Attachment for RG178, RG196, .235 inch D Hole



1 2 3



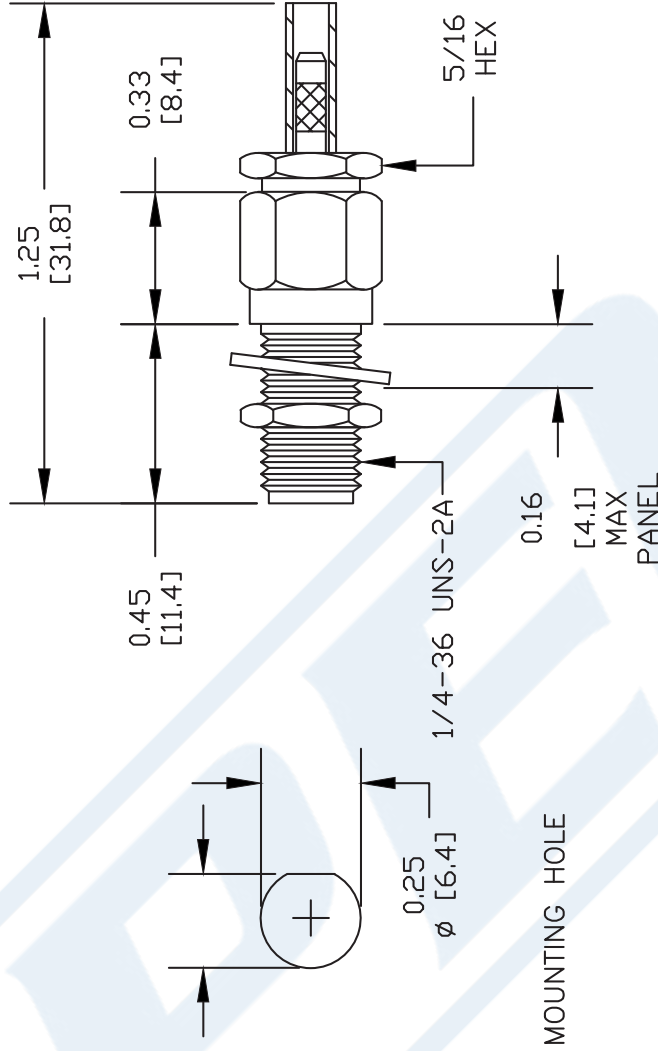
STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

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

CRIMP SIZE REQUIRED

CONTACT: SOLDER
FERRULE: .100" HEX CRIMP TOOL



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

PE4422

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FSCM NO. 53919

REV. A

CAD FILE 082908

SCALE N/A

SIZE A

127

Flexible RG196 Coax Cable Single
Shielded with White PTFE Jacket

RF Cables Technical Data Sheet

RG196A/U

Configuration

- Flexible Cable
- 1 Shield(s)

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		1,000	MHz
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			2,000	Vrms
Nominal Capacitance		32 [104.99]		pF/ft [pF/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	400					MHz
Attenuation, Typ	33					dB/100ft
	108.27					dB/100m

Mechanical Specifications

Diameter	0.08 in [2.03 mm]
Weight	0.005 lbs/ft [0.01 Kg/m]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver, 7 Strands	0.011 in [0.28 mm]
Conductor Type	Stranded	
Dielectric	PTFE	0.035 in [0.89 mm]
First Shield	Silver Plated Copper Braid 92.3% coverage	0.054 in [1.37 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)

Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket

RF Cables Technical Data Sheet

RG196A/U

Jacket	PTFE, White	0.08 in [2.03 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 RG196 Coax Cable Single Shielded with White PTFE 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.

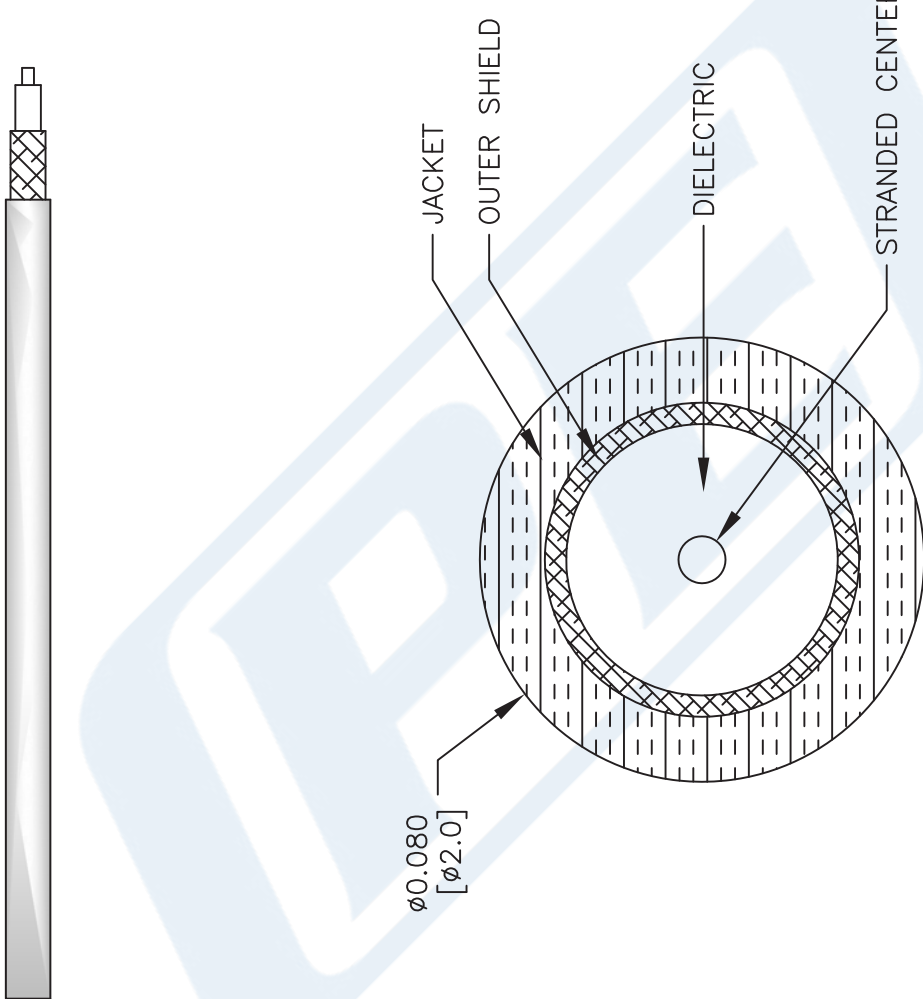
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)

URL: <https://www.pasternack.com/flexible-0.080-rg196-50-ohm-coax-cable-ptfe-jacket-rg196a-u-p.aspx>

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RG196A/U CAD Drawing

Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket



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CAD FILE	111716	SCALE	N/A
SIZE	A		41742

DWG TITLE RG196A/U		FSCM NO.	53919
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