



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](#)



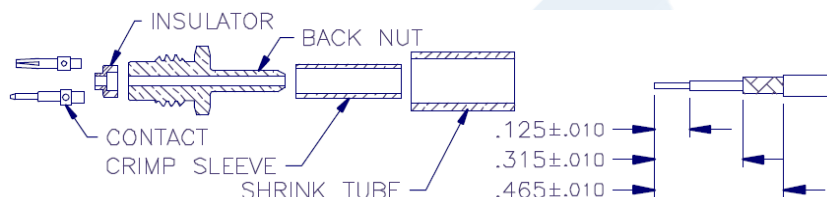
SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

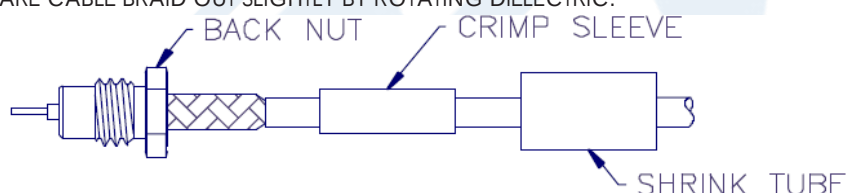
PE45490

Assembly Instruction

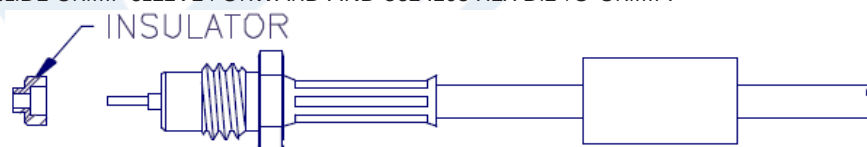
Assembly Instructions



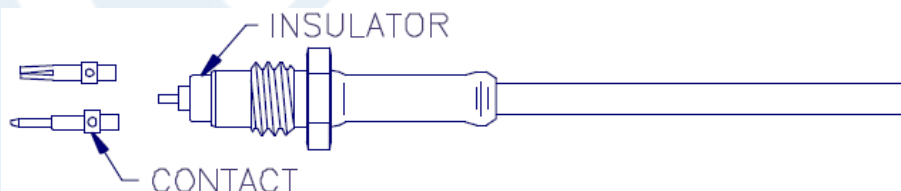
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



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.

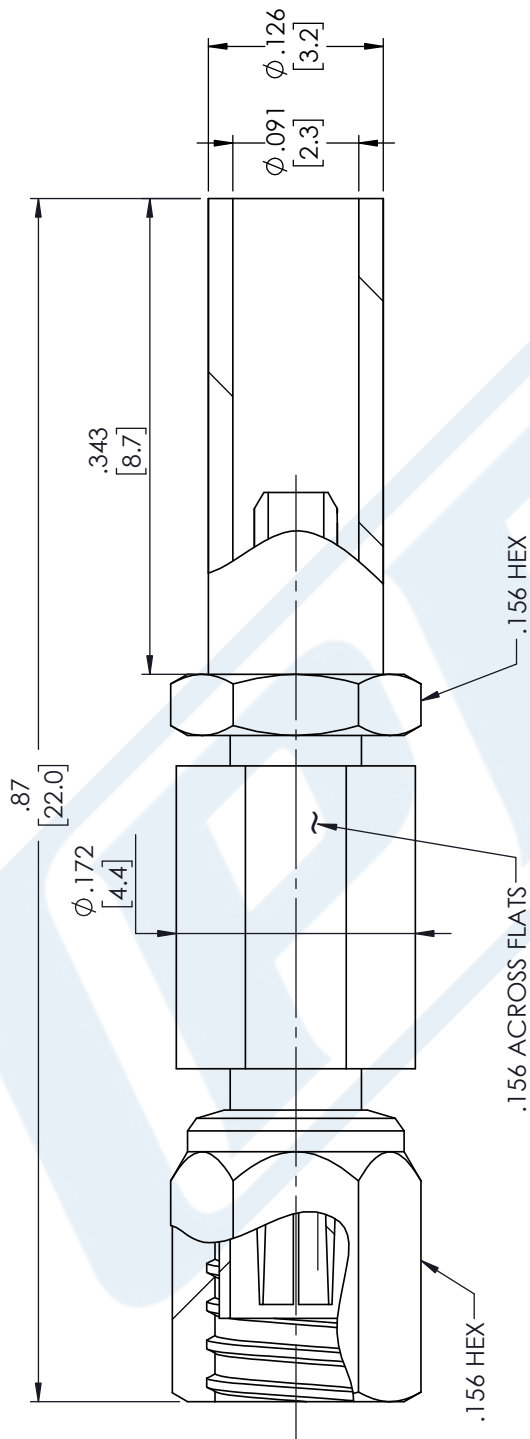
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45490-p.aspx)

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

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.

PE45490 CAD Drawing

SSMC Plug 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



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

PE45490

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].



SSMA Male Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE44381

Configuration

- SSMA Male Connector
- MIL-STD-348
- 50 Ohms
- Straight Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment
- 1/4 inch Hex

Features

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

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE44381 SSMA 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 SSMA male connector PE44381 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	0.82 in [20.83 mm]
Width/Dia.	0.25 in [6.35 mm]
Weight	0.068 lbs [30.84 g]
Mating Torque	3 to 5 in-lbs [0.34 to 0.57 Nm]

Material Specifications

Description	Material	Plating
Contact		Gold MIL-G-45204
Insulation	PTFE	
Body	Brass	Nickel QQ-N-290
Coupling Nut	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: [SSMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE44381](#)



SSMA Male Connector Crimp/Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE44381

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

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

Plotted and Other Data

Notes:

SSMA 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.

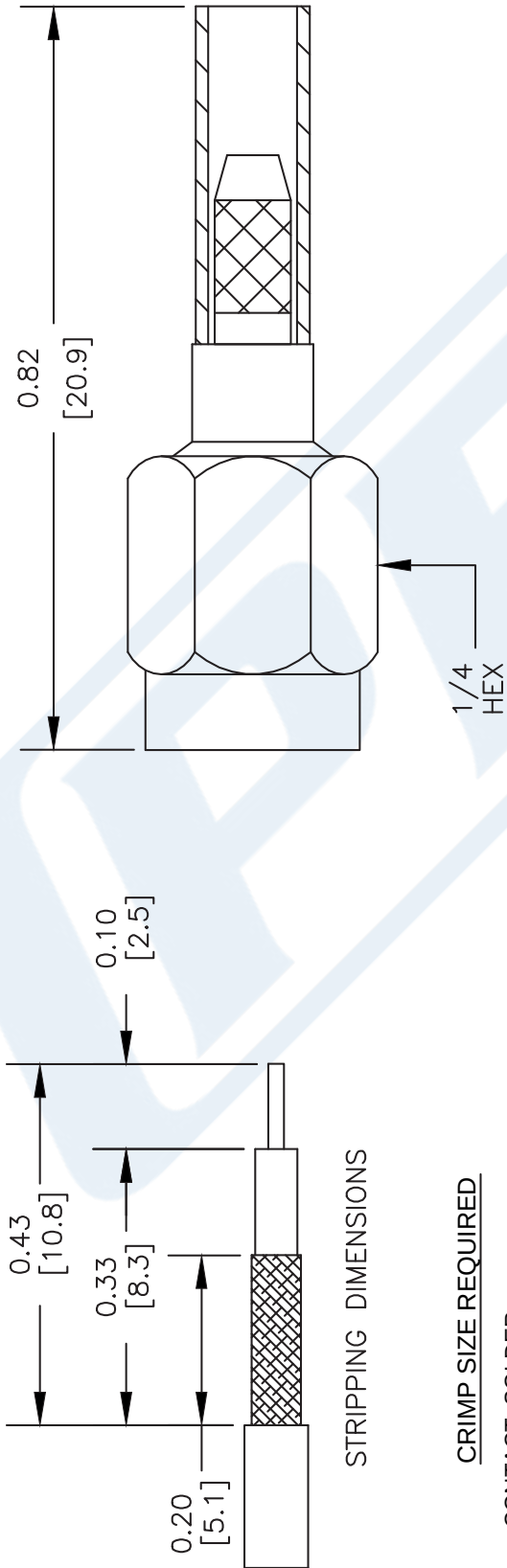
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMA Male Connector Crimp/Solder Attachment for RG178, RG196 PE44381](#)

URL: <https://www.pasternack.com/ssma-male-standard-rg178-rg196-connector-pe44381-p.aspx>

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PE44381 CAD Drawing

SSMA Male 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.
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
PE44381

FSCM NO. 53919

PE PASTERNAK®
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

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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.

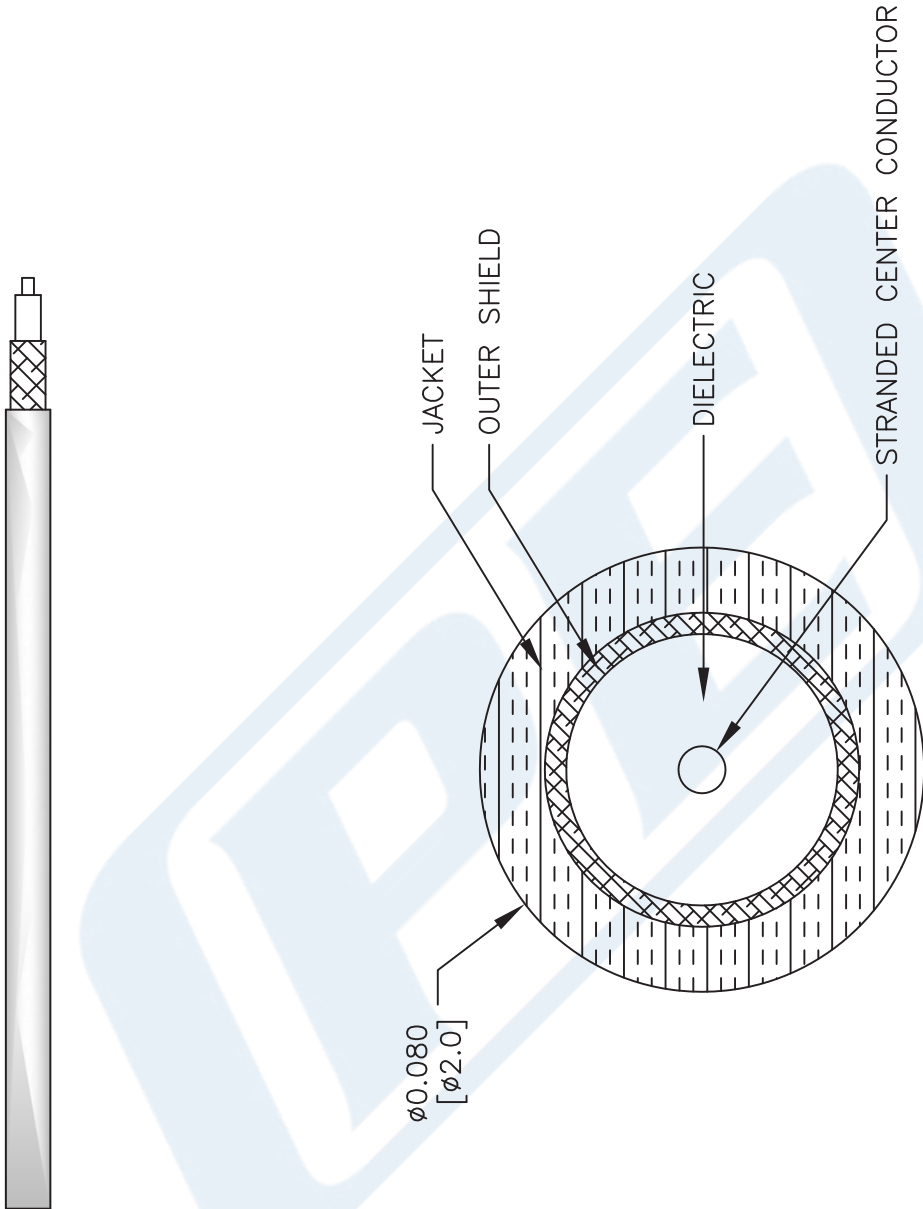
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)

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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DWG TITLE
RG196A/U

FSCM NO. 53919

41742

SIZE A

SCALE N/A

CAD FILE 111716

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