



## 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  
 Width/Dia.

 0.7 in [17.78 mm]  
 0.156 in [3.96 mm]

 Mating Cycles  
 Mating Torque

 500 Cycles  
 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

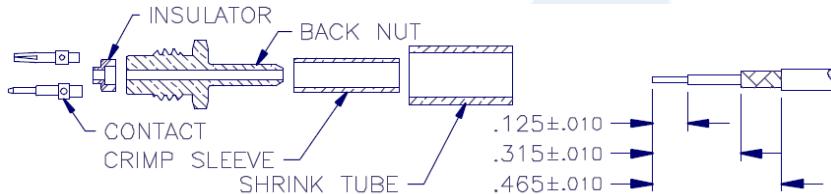


RF Connectors  
Technical Data Sheet

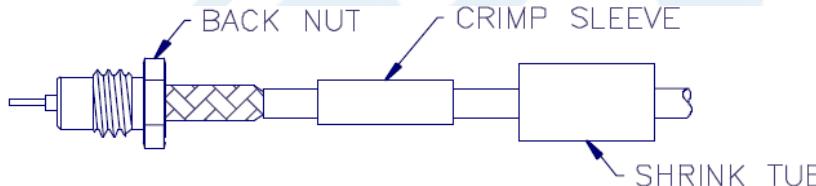
PE45490

Assembly Instruction

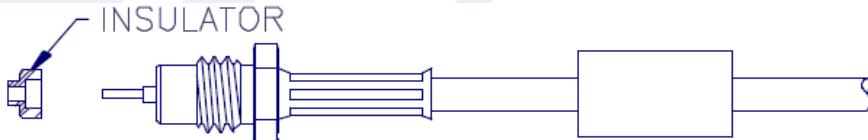
Assembly Instructions



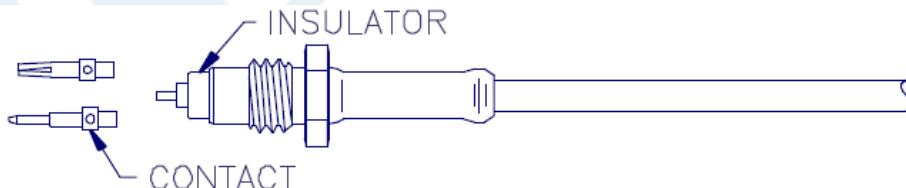
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE **(IF SUPPLIED)** OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



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 DIELECTRIC 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.

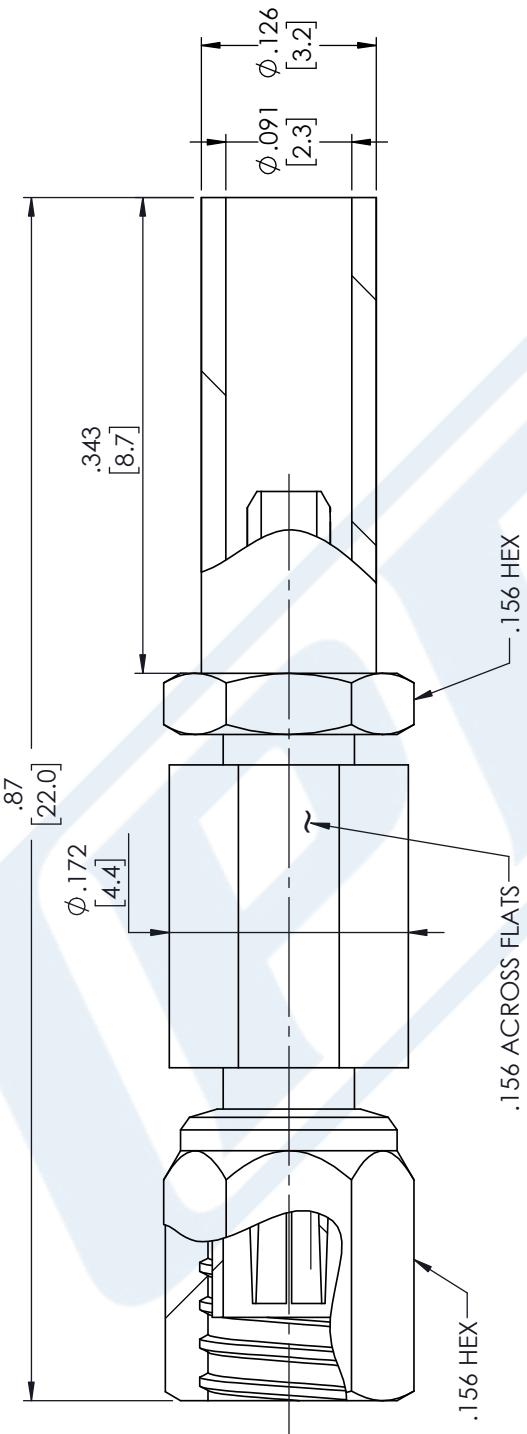
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](#)

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



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**STANDARD TOLERANCES**  
ONLY TO DIMENSIONS IN INCHES

X	$\pm 0.2$
.XX	$\pm 0.01$
.XXX	$\pm 0.005$

**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].

CAGE CODE	53919	CAD FILE	052217	SCALE	N/A	SIZE	A	CN2245



## BNC Female Connector Clamp/Solder Attachment For RG178, RG196

### RF Connectors Technical Data Sheet

**PE4389**

#### Configuration

- BNC Female Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG178, RG196

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4389 BNC female connector with clamp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping.

Our BNC female connector PE4389 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  
Width/Dia.

1.1 in [27.94 mm]

0.224 in [5.69 mm]

Weight

0.041 lbs [18.6 g]

##### Material Specifications

Description	Material	Plating
Body	Brass	Nickel

#### Environmental Specifications

**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: [BNC Female Connector Clamp/Solder Attachment For RG178, RG196 PE4389](#)



## BNC Female Connector Clamp/Solder Attachment For RG178, RG196

### RF Connectors Technical Data Sheet

**PE4389**

BNC Female 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 99.4% 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: [BNC Female Connector Clamp/Solder Attachment For RG178, RG196 PE4389](#)

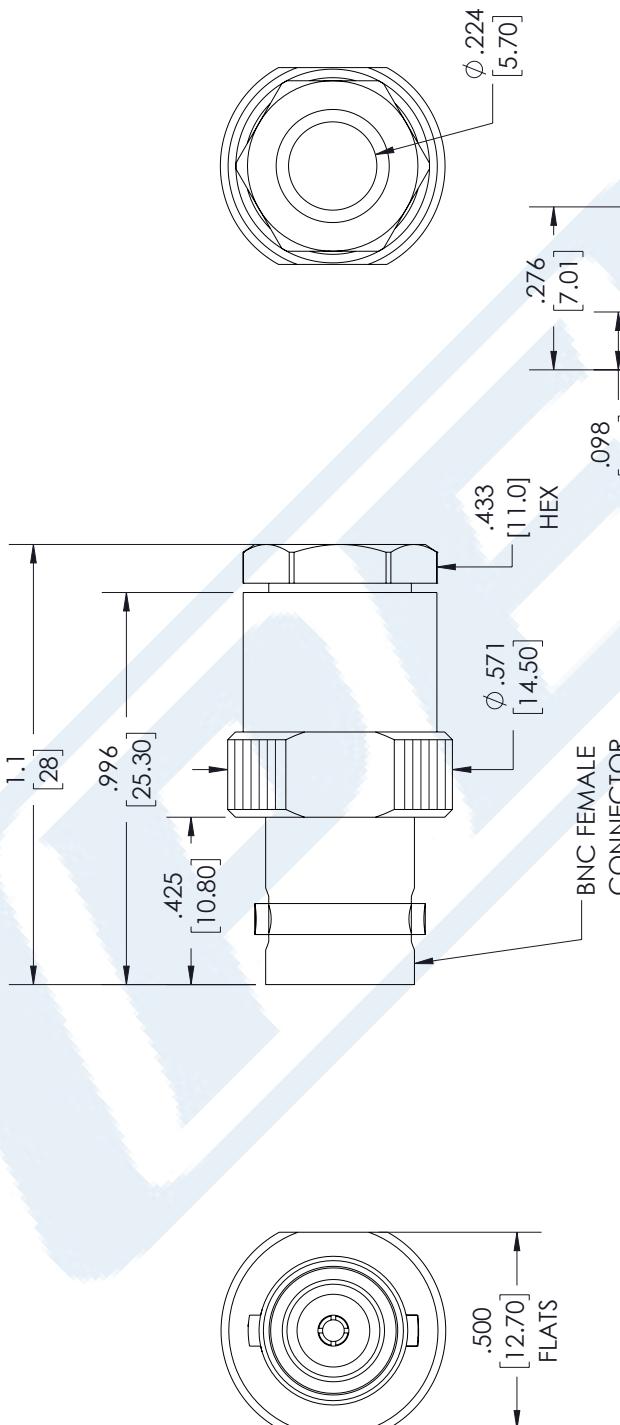
URL: <https://www.pasternack.com/bnc-female-standard-rg178-rg196-connector-pe4389-p.aspx>

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# PE4389 CAD Drawing

BNC Female Connector Clamp/Solder Attachment For RG178, RG196

REVISIONS				
REV.	DESCRIPTION	DATE	APPROVED	
B	PCR PE4389 20220908	11/15/2022	TGALLA	



## STRIPPING DIMENSIONS

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS TOLERANCES:		THIRD ANGLE PROJECTION
$X = \pm 2$ [5.08]      FRACTIONS $.XX = \pm .02$ [.51] $\pm 1/32$ $XXX = \pm .005$ [.13]      ANGLES $\pm 1^\circ$ $L$ CABLE LENGTH (L) TOLERANCES: $L \leq 12$ [305] $+1/-0$ $12$ [305] $< L \leq 60$ [1524] $+2/-1$ [51] $-0$ $60$ [1524] $< L \leq 120$ [3048] $+4/-1$ [102] $-0$ $120$ [3048] $< L \leq 300$ [7620] $= +6/-15$ [2] $-0$ $300$ [7620] $< L = +5/-6$ [L] $-0$		 
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		ITEM NO. PE4389

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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](#)

## 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.

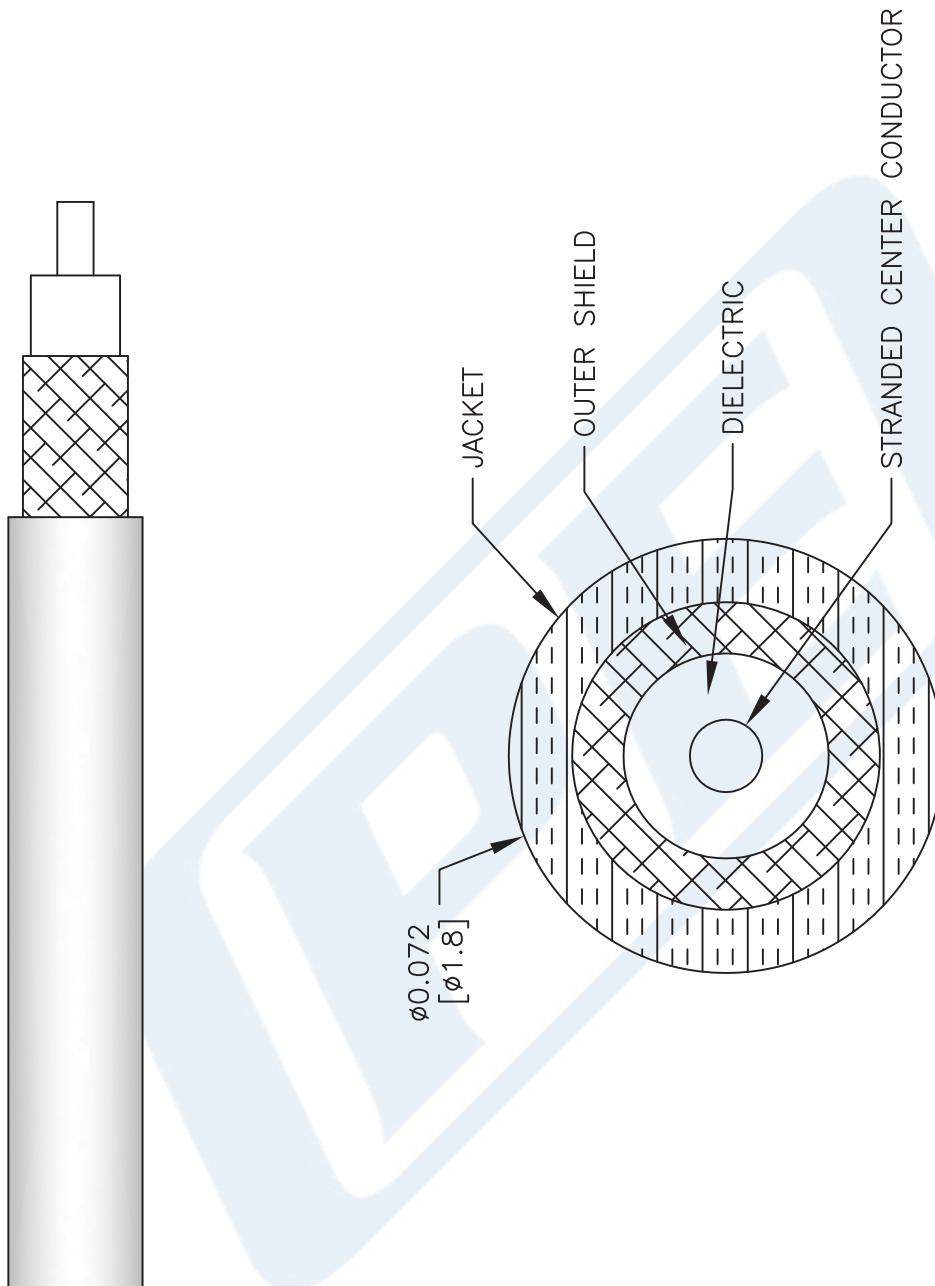
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URL: <https://www.pasternack.com/flexible-0.075-rg178-50-ohm-coax-cable-fep-jacket-rg178b-u-p.aspx>

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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	CAD FILE	032117

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SIZE	A	2233
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