



## 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<br>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<br>MIL-G-45204 |
| Insulation   | Teflon           |                     |
| Body         | Beryllium Copper | Gold<br>MIL-G-45204 |
| Coupling Nut | Beryllium Copper | Gold<br>MIL-G-45205 |
| Crimp Sleeve | Brass            | Gold<br>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](#)



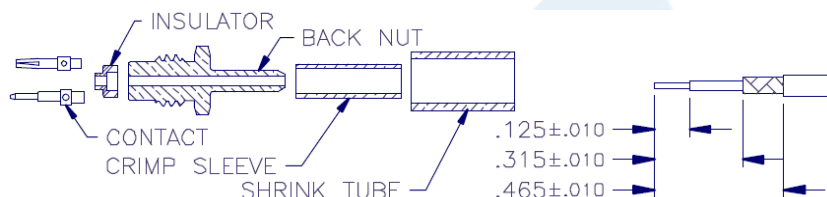
## SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196

### RF Connectors Technical Data Sheet

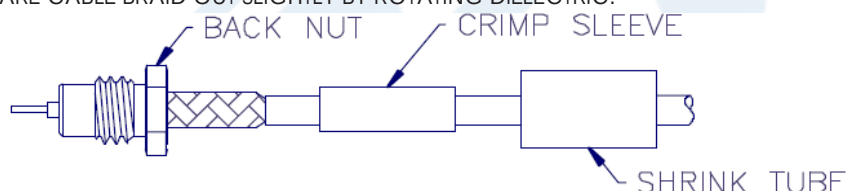
PE45490

#### Assembly Instruction

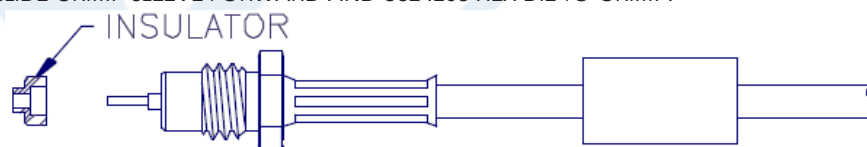
#### Assembly Instructions



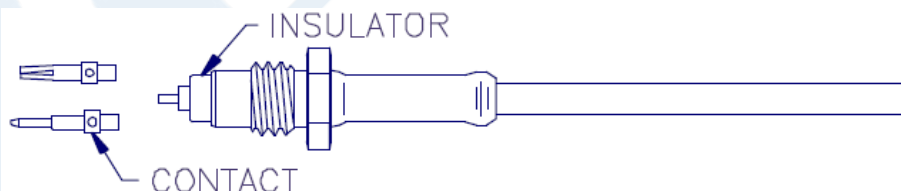
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



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.

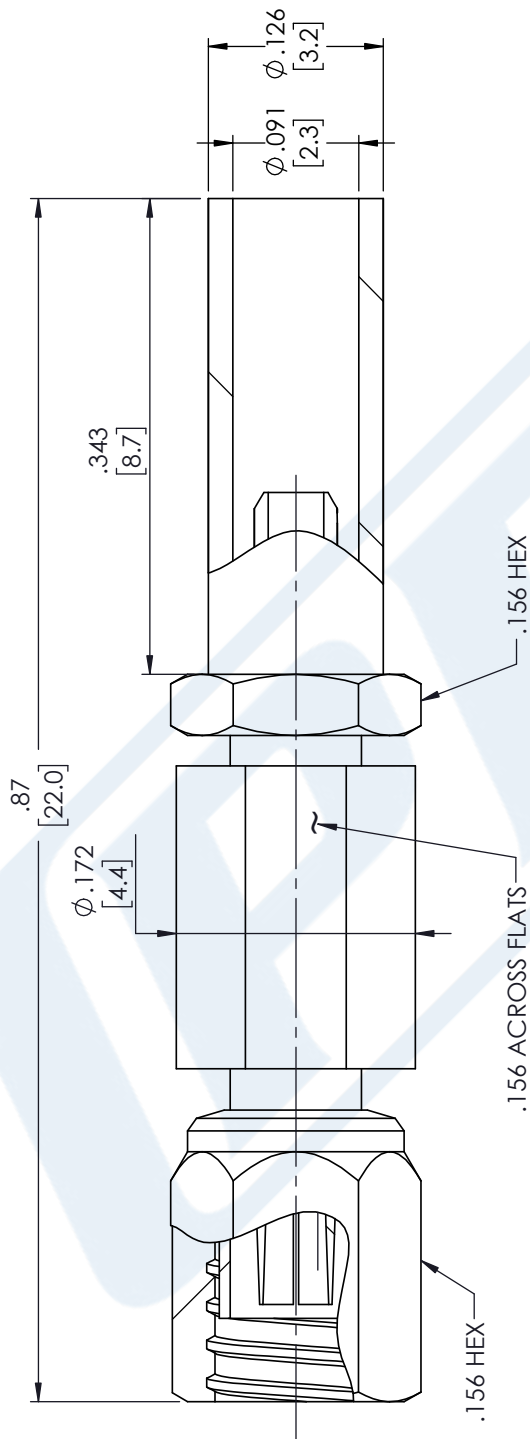
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SSMC Plug Connector Crimp/Solder Attachment for RG178, RG196 PE45490](https://www.pasternack.com/ssmc-plug-rg178-rg196-connector-pe45490-p.aspx)

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



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DWG TITLE

PE45490

CAGE CODE 53919

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].

CAD FILE 052217

SCALE N/A

SIZE A

CN2245



## MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip

### RF Connectors Technical Data Sheet

PE44645

#### Configuration

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

#### Features

- Gold Plated Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE44645 MMCX 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 MMCX plug connector PE44645 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     | 0.554 in [14.07 mm] |
| Width/Dia. | 0.18 in [4.57 mm]   |
| Weight     | 0.007 lbs [3.18 g]  |

#### Material Specifications

| Description | Material | Plating |
|-------------|----------|---------|
| Contact     |          | Gold    |
| Insulation  | PTFE     |         |
| Body        | Brass    | Gold    |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip PE44645](#)



## MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip

### RF Connectors Technical Data Sheet

PE44645

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

#### Plotted and Other Data

Notes:

MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip 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: [MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip PE44645](#)

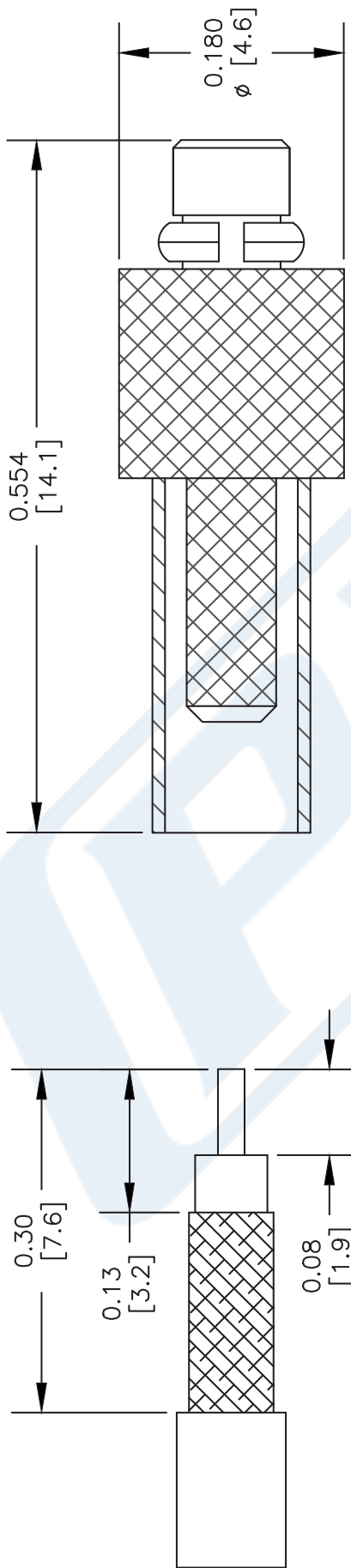
URL: <https://www.pasternack.com/mmcx-plug-standard-rg178-rg196-connector-pe44645-p.aspx>

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PE44645 CAD Drawing

MMCX Plug Connector Crimp/Solder Attachment for RG178, RG196, Easy Grip



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER  
FERRULE: .100" HEX CRIMP TOOL

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DWG TITLE

**PE44645**

FSCM NO. 53919

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- 3. DIMENSIONS ARE IN INCHES [mm].
- 4. FITS MIL-C-17 AND EQUIVALENT CABLES.

CAD FILE 011109

SCALE N/A

SIZE A

XXXX



## 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<br>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] |
|--------|-------------|-------------------|

#### 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.

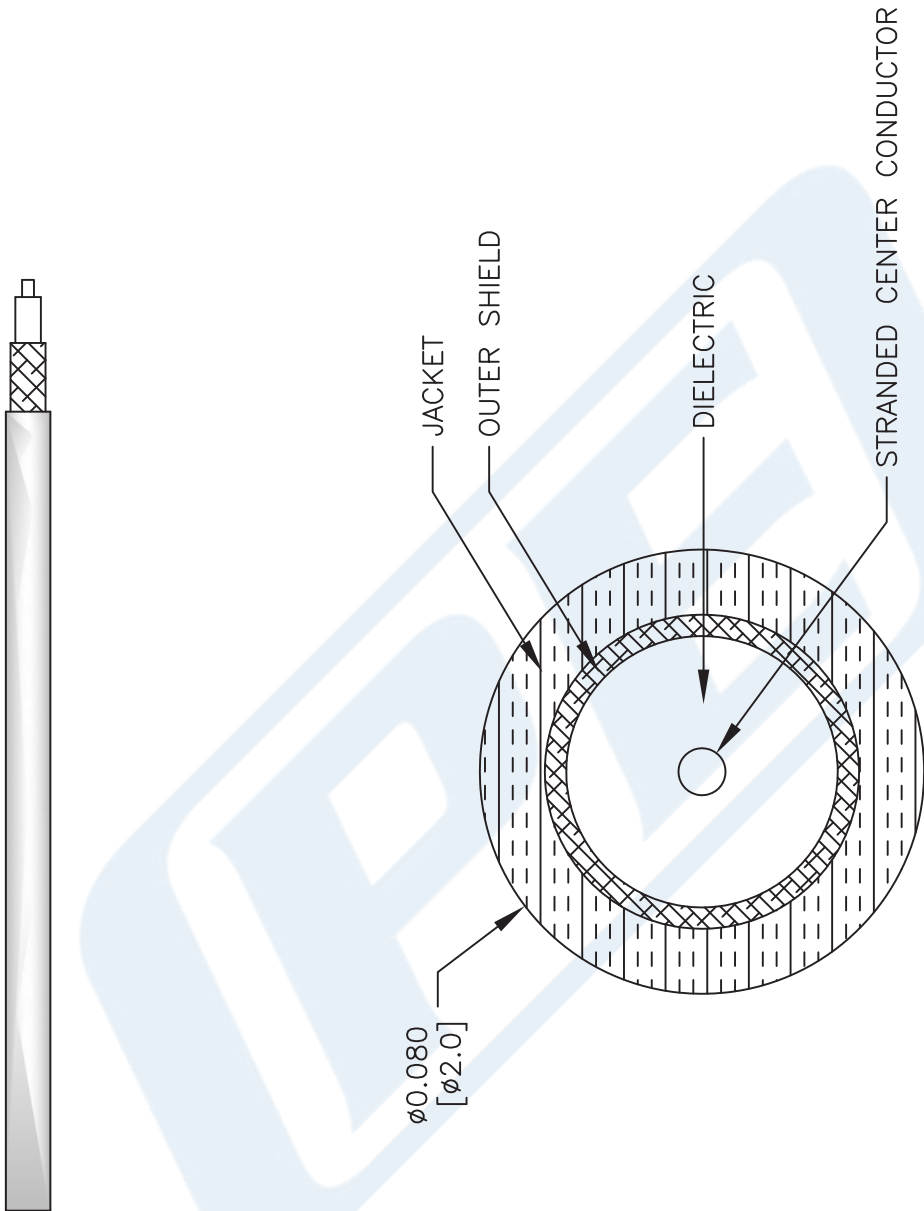
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG196 Coax Cable Single Shielded with White PTFE Jacket RG196A/U](#)

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

CAD FILE 111716

SCALE N/A

SIZE A

41742

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