



SMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4160

Configuration

- SMC Plug Connector
- MIL-STD-348A
- 50 Ohms
- Right Angle Body Geometry
- RG178, RG196 Interface Type
- Crimp/Solder Attachment
- 1/4 inch Hex

Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact
- 30 µin minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4160 SMC plug right angle connector with crimp/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMC plug connector operates up to a maximum frequency of 3 GHz and offers good VSWR of 1.5:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMC plug right angle connector PE4160 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 | | 3 | GHz |
| VSWR | | | 1.5:1 | |
| Operating Voltage (AC) | | | 250 | Vrms |

Mechanical Specifications

Size

| | |
|---------------|---------------------------------|
| Length | 0.55 in [13.97 mm] |
| Width/Dia. | 0.25 in [6.35 mm] |
| Height | 0.66 in [16.76 mm] |
| Weight | 0.013 lbs [5.9 g] |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE4160](#)



SMC Plug Right Angle Connector Crimp/
Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4160

Material Specifications

| Description | Material | Plating |
|--------------|------------------|---------------------------|
| Contact | Beryllium Copper | Gold 30 µin minimum |
| Insulation | PTFE | |
| Body | Brass | Nickel 100 µin minimum |
| Coupling Nut | Brass | Nickel 100 µin minimum |

Environmental Specifications

Temperature

Operating Range

-65 to +165 deg C

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: [SMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE4160](#)

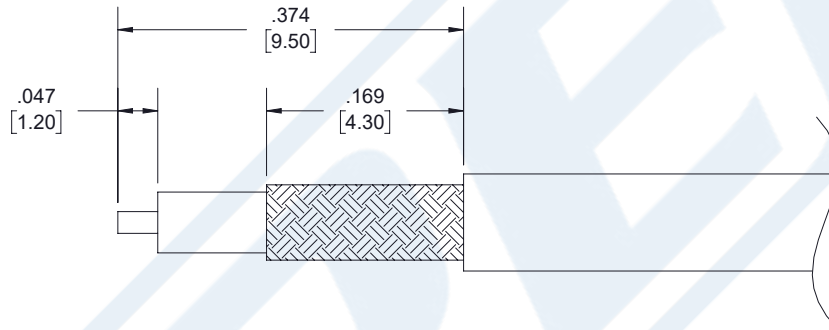


SMC Plug Right Angle Connector Crimp/
Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4160

Assembly Instruction



ASSEMBLY PROCEDURES

1. STRIP CABLE TO THE DIMENSIONS SHOWN, DO NOT NICK CENTER CONDUCTOR OR BRAID. SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR AND SOFT SOLDER CENTER CONDUCTOR IN PLACE.
3. CRIMP FERRULE AND PRESS CAP DOWN.

CRIMP SIZE REQUIRED

- FERRULE: .100 [2.54] HEX CRIMP TOOL.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE4160](#)



SMC Plug Right Angle Connector Crimp/ Solder Attachment for RG178, RG196

RF Connectors Technical Data Sheet

PE4160

SMC Plug Right Angle 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.

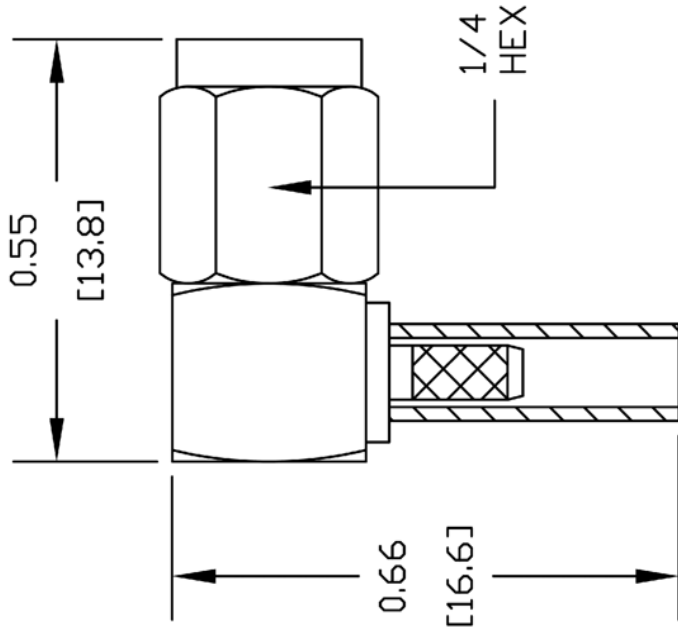
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug Right Angle Connector Crimp/Solder Attachment for RG178, RG196 PE4160](https://www.pasternack.com/smc-plug-standard-rg178-rg196-connector-pe4160-p.aspx)

URL: <https://www.pasternack.com/smc-plug-standard-rg178-rg196-connector-pe4160-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.

PE4160 CAD Drawing

SMC Plug Right Angle 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

PE4160

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 120517

SCALE N/A

SIZE A

7361



SMA Male Connector Solder Attachment For RG178, RG196

RF Connectors Technical Data Sheet

PE4213

Configuration

- SMA Male Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG178, RG196
- 5/16 inch Hex

Features

- Max. Operating Frequency 1 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 μ m minimum contact plating

Applications

- General Purpose Test
- Custom Cable Assemblies

Description

Pasternack's PE4213 SMA male connector with solder/solder attachment for RG178 and RG196 is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 1 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4213 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 | | 1,000 | MHz |
| VSWR | | | 1.3:1 | |
| Operating Voltage (AC) | | | 250 | Vrms |

Mechanical Specifications

| | |
|---------------|---------------------------------|
| Weight | 0.013 lbs [5.9 g] |
| Mating Torque | 3 to 5 in-lbs [0.34 to 0.57 Nm] |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Solder Attachment For RG178, RG196 PE4213](#)



SMA Male Connector Solder Attachment For RG178, RG196

RF Connectors Technical Data Sheet

PE4213

Material Specifications

| Description | Material | Plating |
|--------------|----------|---------------------------|
| Contact | Brass | Gold 50 µin minimum |
| Insulation | PTFE | |
| Body | Brass | Nickel 100 µin minimum |
| Coupling Nut | Brass | Nickel 100 µin minimum |
| Crimp Sleeve | Brass | Nickel |

Environmental Specifications

Temperature

Operating Range -65 to +165 deg C

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

Plotted and Other Data

Notes:

SMA Male Connector 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: [SMA Male Connector Solder Attachment For RG178, RG196 PE4213](#)

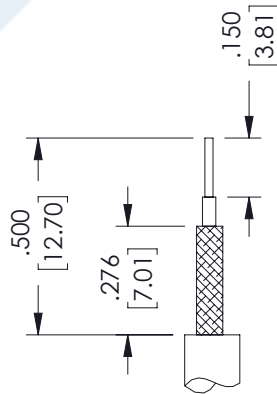
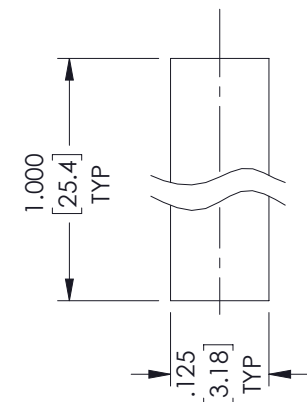
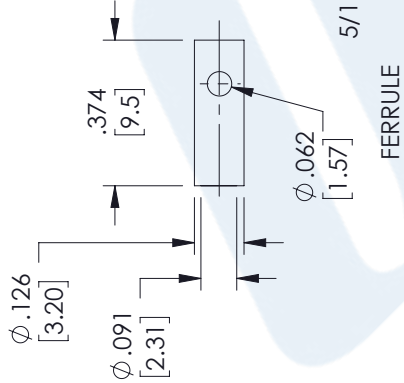
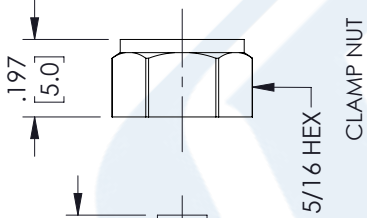
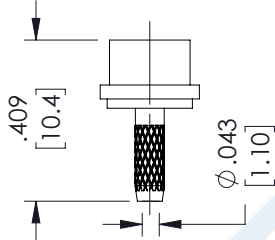
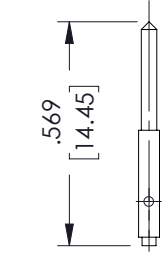
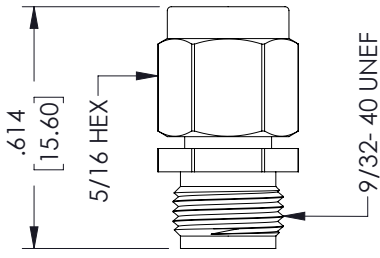
URL: <https://www.pasternack.com/sma-male-standard-rg178-rg196-connector-pe4213-p.aspx>

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PE4213 CAD Drawing

SMA Male Connector Solder Attachment For RG178, RG196

| REVISIONS | | | |
|-----------|-----------------|------------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| B | PE4213 20220826 | 09/01/2022 | AMARG |



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN. DO NOT NICK CENTER CONDUCTOR. TIN CENTER CONDUCTOR.
2. SLIDE FERRULE, HEAT SHRINK & CLAMP NUT OVER CABLE. FLAIR BRAID & SLIDE WEDGE ASSEMBLY UNDER BRAID WITH CENTER CONDUCTOR PROTRUDING THROUGH HOLE IN INSULATOR. SLIDE FERRULE OVER BRAID & AGAINST CLAMP NUT. SOLDER FERRULE TO BRAID.
3. SOLDER CONTACT TO CENTER CONDUCTOR. CLEAN. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN TO 8~10 IN.-LBS.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

| | | |
|--------------|--------|-------------|
| .X = ±.2 | [5.08] | FRACTIONS |
| .XX = ±.02 | [.51] | ±.132 |
| .XXX = ±.005 | [.13] | ANGLES ± 1° |

CABLE LENGTH (L) TOLERANCES:

| | | |
|----------------------|--------|-----------------|
| L ≤ 12 | [305] | = +1 [25] / -0 |
| 12 [305] < L ≤ 60 | [1524] | = +2 [51] / -0 |
| 60 [1524] < L ≤ 120 | [3048] | = +4 [102] / -0 |
| 120 [3048] < L ≤ 300 | [7620] | = +6 [152] / -0 |
| 300 [7620] < L = | +5%L | / -0 |

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.



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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV B

| | | | |
|------|-----------|----------|----------|
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 53919 | WZHANG | PE4213 |

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] |
|--------|----------|--------------------|

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



NOTES:
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2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

DWG TITLE
RG178B/U

CAGE CODE **53919**

CAD FILE 062117

SCALE N/A

SIZE A

2233



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