

## SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188



### RF Connectors Technical Data Sheet

**PE45209**

#### Configuration

- SSMC Plug Connector
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG316, RG174, RG188
- 5/32 inch Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE45209 SSMC plug connector with crimp/solder attachment for RG316, RG174 and RG188 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 1.5:1.

Our SSMC plug connector PE45209 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                  |         |         | 1.5:1   |       |
| Insulation Resistance | 1,000   |         |         | MOhms |

#### Mechanical Specifications

##### Size

|               |                    |
|---------------|--------------------|
| Length        | 0.94 in [23.88 mm] |
| Width/Dia.    | 0.156 in [3.96 mm] |
| Weight        | 0.0033 lbs [1.5 g] |
| Mating Cycles | 500 Cycles         |
| Mating Torque | 1 in-lbs [0.11 Nm] |

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 RG316, RG174, RG188 PE45209](#)

SSMC Plug Connector Crimp/Solder  
Attachment for RG316, RG174, RG188



**RF Connectors**  
**Technical Data Sheet**

**PE45209**

**Material Specifications**

| Description  | Material         | Plating |
|--------------|------------------|---------|
| Contact      | Beryllium Copper | Gold    |
| Insulation   | PTFE             |         |
| Body         | Beryllium Copper | Gold    |
| Coupling Nut | Beryllium Copper | Gold    |

**Environmental Specifications**

**Temperature**

Operating Range -45 to +120 deg C

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

**Plotted and Other Data**

Notes:

SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188 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 RG316, RG174, RG188 PE45209](#)

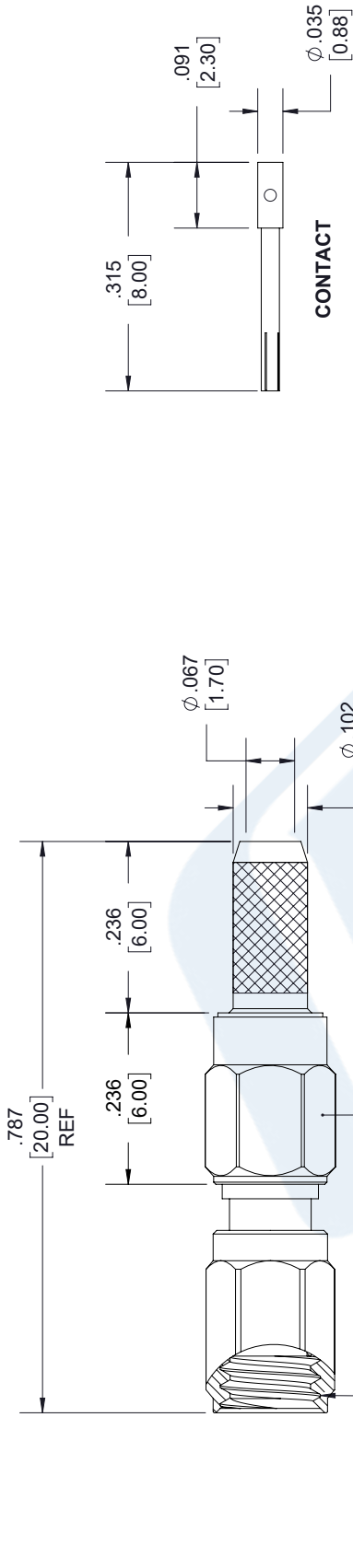
URL: <https://www.pasternack.com/ssmc-male-rg316-rg174-rg188-connector-pe45209-p.aspx>

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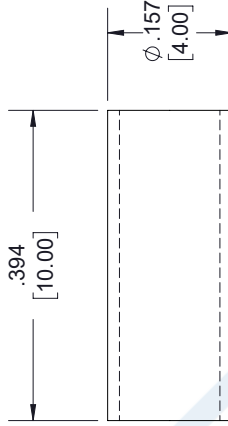
# PE45209 CAD Drawing

SSMC Plug Connector Crimp/Solder Attachment for RG316, RG174, RG188

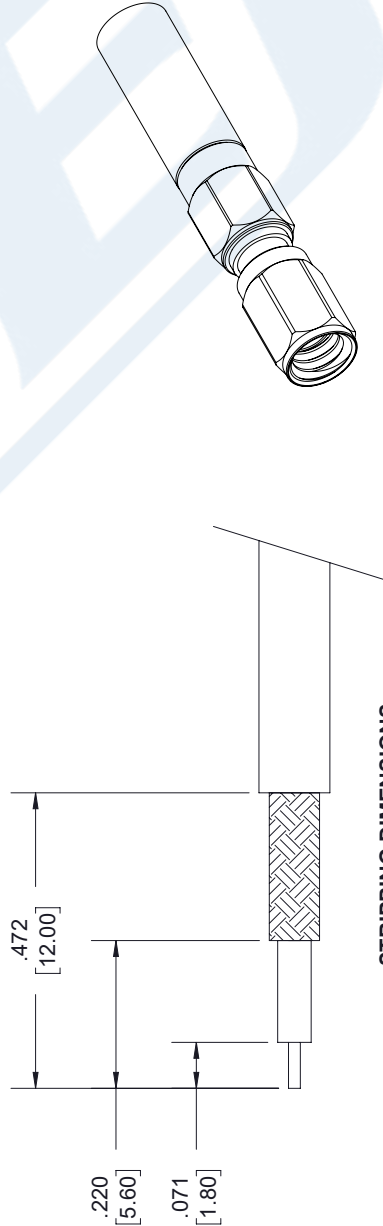
| REVISIONS |                     |          |          |
|-----------|---------------------|----------|----------|
| REV.      | DESCRIPTION         | DATE     | APPROVED |
| A         | PCR PE45209 2011127 | 12/13/19 | SELLIS   |



SSMC PLUG



FERRULE



STRIPPING DIMENSIONS

## NOTES:

- CABLE ATTACHMENT:
  - OUTER: CRIMP.
  - INNER: SOLDER.
- CRIMP SIZE REQUIRED:
  - FERRULE: .134 [3.40] HEX. CRIMP TOOL.
  - CONTACT: SOLDER.

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

## TOLERANCES:

.X = ± .2 [5.08] FRACTIONS  
.XX = ± .02 [.51] ± 1/32  
.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% / -0

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.



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SHEET 1 OF 1

SCALE N/A

REV A



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SIZE A CAGE CODE 53919 DRAWN BY K.DANG ITEM NO. PE45209

REV A



SMB Jack Bulkhead Mount Connector Crimp/  
Solder Attachment for RG174, RG316, RG188,  
LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4097**

### Configuration

- SMB Jack Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, .100 inch
- Bulkhead

### Features

- Max. Operating Frequency 4 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

### Applications

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

### Description

Pasternack's PE4097 SMB jack bulkhead connector with crimp/solder attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100 and .100 inch is part of our full line of RF components available for same-day shipping. Our SMB jack connector operates up to a maximum frequency of 4 GHz and offers good VSWR of 1.3:1. This SMB 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 SMB jack bulkhead connector PE4097 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      |         | 4       | GHz   |
| VSWR                   |         |         | 1.3:1   |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |

### Mechanical Specifications

#### Size

|            |                     |
|------------|---------------------|
| Length     | 0.867 in [22.02 mm] |
| Width/Dia. | 0.25 in [6.35 mm]   |
| Height     | 0 in [0 mm]         |
| Weight     | 0.005 lbs [2.27 g]  |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4097](#)



SMB Jack Bulkhead Mount Connector Crimp/  
Solder Attachment for RG174, RG316, RG188,  
LMR-100, PE-B100, PE-C100, 0.100 inch

## RF Connectors Technical Data Sheet

**PE4097**

### Material Specifications

| Description | Material | Plating                   |
|-------------|----------|---------------------------|
| Contact     | Brass    | Gold<br>30 µin minimum    |
| Insulation  | PTFE     |                           |
| Body        | Brass    | Nickel<br>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:

SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch 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: [SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch PE4097](#)

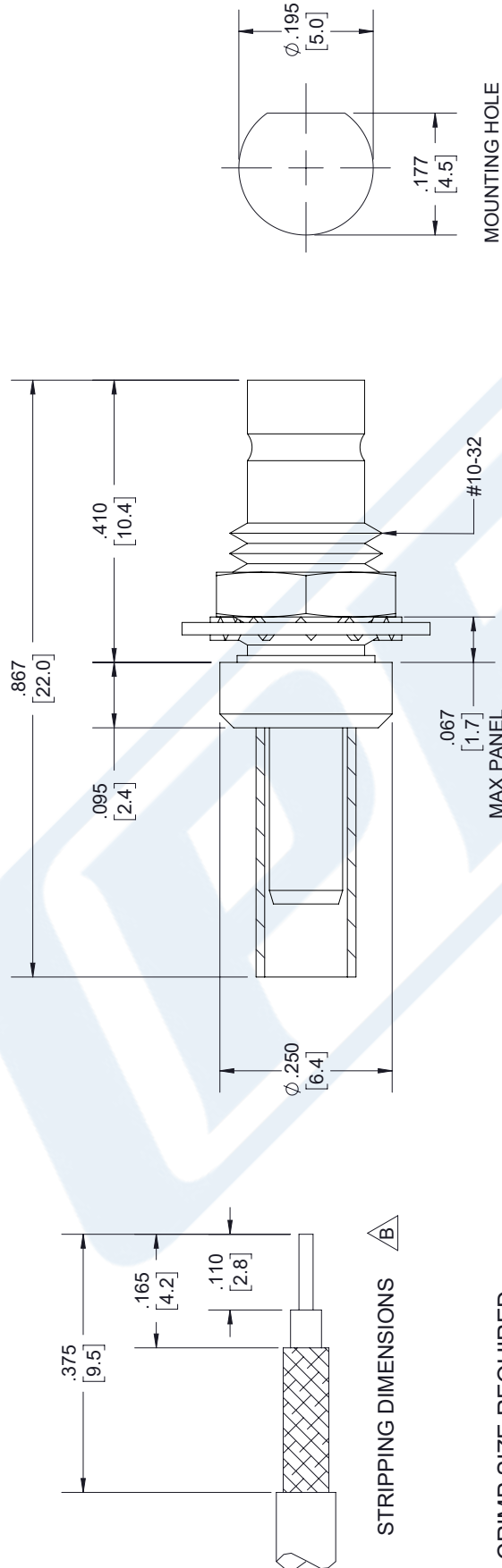
URL: <https://www.pasternack.com/smb-jack-standard-rg174-rg316-rg188-connector-pe4097-p.aspx>

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# PE4097 CAD Drawing

SMB Jack Bulkhead Mount Connector Crimp/Solder Attachment for  
RG174, RG316, RG188, LMR-100, PE-B100, PE-C100, 0.100 inch

| REVISIONS |                            |         |          |
|-----------|----------------------------|---------|----------|
| REV.      | DESCRIPTION                | DATE    | APPROVED |
| B         | UPDATE WIRE STRIPPING DIMS | 5/19/22 | SRAUTUS  |



**CRIMP SIZE REQUIRED**  
CONTACT: SOLDER  
FERRULE: .128" HEX CRIMP TOOL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                          |                                                                                                                                                                                                |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>PE PASTERNAK</b><br>an INFINITI® brand<br>Pasternack Enterprises, Inc.<br>P.O. Box 16759, Irvine, CA 92623<br>Phone: 1.949.261.1920   1.866.727.8376<br>Fax: 1.949.261.7451<br>Website: www.pasternack.com<br>E-mail: sales@pasternack.com                                                                                                                                                                                                                                                       |                                                                          | THIRD-ANGLE PROJECTION<br><br>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.<br>SHEET 1 OF 1<br>SCALE N/A                          |  |
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## Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket



### RG188A/U

#### Configuration

- Flexible Cable
- 1 Shield(s)

#### Features

- High temperature 50 Ohm data signal transmission
- Teflon taped outer jacket results in a 200 degree C operating temperature
- Stranded center conductor allows cable to be very flexible
- Small diameter is ideal for tight fit applications
- Associated connectors and crimp tools available

#### Applications

- Ethernet
- Data
- Premise Wiring
- R&D

#### Description

RG188 coax cable from Pasternack is only one of a large number of radio frequency twinaxial and coaxial cable types specifically stocked to be ready for quick shipment. Pasternack's RG188A/U coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This flexible 50 Ohm coax cable RG188 is constructed with a 0.11 inch diameter and PTFE jacket.

RG188 RG188A/U flexible 50 Ohm coax cable with PTFE jacket is rated for a 3 GHz maximum operating frequency. This 50 Ohm 0.11 inch diameter and flexible coax cable is built with a shield count of 1.

Pasternack's RG188 coax is constructed with PTFE dielectric and a maximum operating temperature of 250 degrees C. RG188 coax cable specs for this wire properties can be found on its RF coax cable RG-188 datasheet PDF specifications above.

RG188 cable is part of more than one million RF, microwave and millimeter wave parts in stock at Pasternack. This RG-188 coax cable is ready to buy and can be shipped worldwide. Pasternack also maintains a wide selection of other radio frequency twinaxial and coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave and millimeter wave components.

#### Electrical Specifications

| Description                          | Minimum | Typical     | Maximum      | Units        |
|--------------------------------------|---------|-------------|--------------|--------------|
| Frequency Range                      | DC      |             | 3            | GHz          |
| Impedance                            |         | 50          |              | Ohms         |
| Velocity of Propagation              |         | 70          |              | % of c       |
| Time Delay                           |         | 1.45 [4.76] |              | ns/ft [ns/m] |
| Dielectric Withstanding Voltage (AC) |         |             | 2,000        | Vrms         |
| Inner Conductor DC Resistance        |         |             | 84.1         | Ohms/1000ft  |
| Nominal Capacitance                  |         |             | 29.3 [96.13] | pF/ft [pF/m] |
| Power@ 1GHz                          |         |             | 160          | Watts        |

#### Performance by Frequency Band

| Description | F1  | F2 | F3 | F4 | F5 | Units |
|-------------|-----|----|----|----|----|-------|
| Frequency   | 400 |    |    |    |    | MHz   |

## Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket



### RG188A/U

#### Performance by Frequency Band

| Description      | F1    | F2 | F3 | F4 | F5 | Units    |
|------------------|-------|----|----|----|----|----------|
| Attenuation, Typ | 20    |    |    |    |    | dB/100ft |
|                  | 65.62 |    |    |    |    | dB/100m  |

Electrical Specification Notes:

Static Bending Radius: One Time: 0.52 inch, repeated: 1.03

#### Mechanical Specifications

|          |                         |
|----------|-------------------------|
| Diameter | 0.11 in [2.79 mm]       |
| Weight   | 0.01 lbs/ft [0.01 kg/m] |

#### Construction Specifications

| Description     | Material and Plating                 | Diameter           |
|-----------------|--------------------------------------|--------------------|
| Inner Conductor | Copper Clad Steel, Silver, 7 Strands | 0.02 in [0.51 mm]  |
| Conductor Type  | Stranded                             |                    |
| Dielectric      | PTFE                                 | 0.06 in [1.52 mm]  |
| First Shield    | Silver Plated Copper Braid           | 0.081 in [2.06 mm] |
|                 | 95.2% coverage                       |                    |
| Jacket          | PTFE, White                          | 0.11 in [2.79 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 RG188 Coax Cable Single Shielded with White PTFE Jacket



### RG188A/U

Flexible RG188 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 RG188 Coax Cable Single Shielded with White PTFE Jacket RG188A/U](https://www.pasternack.com/50-ohm-flexible-rg188au-ptfe-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-white-rg188a-u-p.aspx)

URL: <https://www.pasternack.com/50-ohm-flexible-rg188au-ptfe-jacket-silver-plated-copper-braid-outer-conductor-single-shielded-white-rg188a-u-p.aspx>

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## Flexible RG188 Coax Cable Single Shielded with White PTFE Jacket



## STANDARD TOLERANCES

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

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES



**PARNACK**  
THE ENGINEER'S RF SOURCE

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**DWG TITLE**

RG188A/U

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** 091817

SCALE N/A

**SIZE A**

7361