



## SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

PE4401

#### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG188-DS, RG316-DS Interface Type
- Crimp/Solder Attachment
- 5/16 inch Hex

#### Features

- Max. Operating Frequency 12.4 GHz
- Excellent VSWR of 1.21:1
- Gold Plated Brass Contact
- 30 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4401 SMA male connector with crimp/solder attachment for RG188-DS and RG316-DS 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 12.4 GHz and offers excellent VSWR of 1.21:1.

Our SMA male connector PE4401 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                   |         |         | 1.21:1  |       |
| Operating Voltage (AC) |         |         | 335     | Vrms  |

#### Mechanical Specifications

##### Size

|               |                                 |
|---------------|---------------------------------|
| Length        | 0.874 in [22.2 mm]              |
| Width/Dia.    | 0.315 in [8.00 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: [SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4401](#)



## SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

**PE4401**

#### Material Specifications

| Description  | Material | Plating                   |
|--------------|----------|---------------------------|
| Contact      | Brass    | Gold<br>30 µin minimum    |
| Insulation   | PTFE     |                           |
| Body         | Brass    | Nickel<br>100 µin minimum |
| Coupling Nut | Brass    | Nickel<br>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 Crimp/Solder Attachment for RG188-DS, RG316-DS 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.

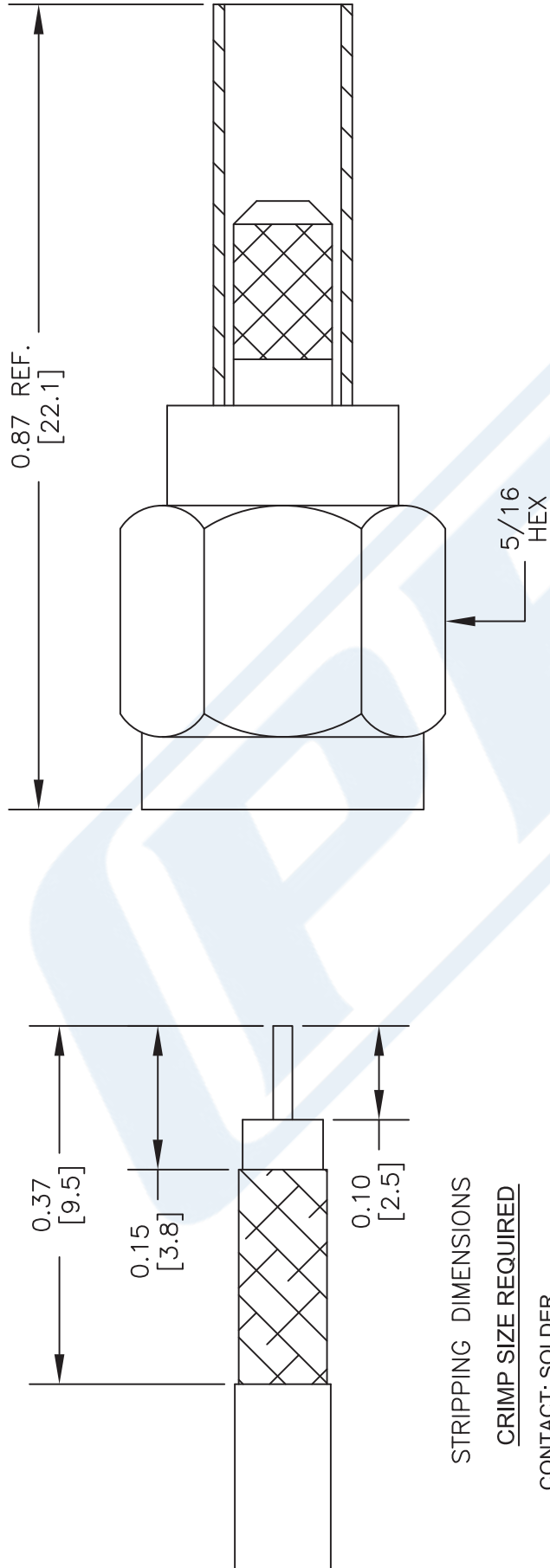
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE4401](#)

URL: <https://www.pasternack.com/sma-male-standard-rg188-ds-rg316-ds-connector-pe4401-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.

# PE4401 CAD Drawing

SMA Male Connector Crimp/Solder Attachment for RG188-DS, RG316-DS



STRIPPING DIMENSIONS

CRIMP SIZE REQUIRED

CONTACT: SOLDER

FERRULE: .151" HEX CRIMP TOOL



Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623

Phone: (949) 261-1920 | Fax: (949) 261-7451

Website: [www.pasternack.com](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

DWG TITLE

**PE4401**

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.

REV. B

FSCM NO. 53919

CAD FILE 032612

SCALE N/A

SIZE A

2233



Banana Plug Connector Crimp/Solder  
Attachment for RG188-DS, RG316-DS

TECHNICAL DATA SHEET

PE45164

**Configuration**

|                                    |                    |
|------------------------------------|--------------------|
| Connector                          | Banana Plug        |
| Connector Interface Type           | RG188-DS, RG316-DS |
| Attachment Method (Shield/Contact) | Crimp/Solder       |
| Body Style                         | Straight           |

**Electrical Specifications**

|           |        |
|-----------|--------|
| Impedance | 0 Ohms |
|-----------|--------|

**Mechanical Specifications**

**Size**

|            |                     |
|------------|---------------------|
| Length     | 2.54 in [64.52 mm]  |
| Width/Dia. | 1.175 in [29.85 mm] |
| Height     | 0.65 in [16.51 mm]  |
| Weight     | 0.041 lbs [18.6 g]  |

**Connector**

|                              |               |
|------------------------------|---------------|
| Type                         | Banana Plug   |
| Contact Material and Plating | Brass, Nickel |
| Body Material and Plating    | Brass, Nickel |
| Dielectric Type              | ABS           |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

Not RoHS Compliant

**Plotted and Other Data**

Notes:

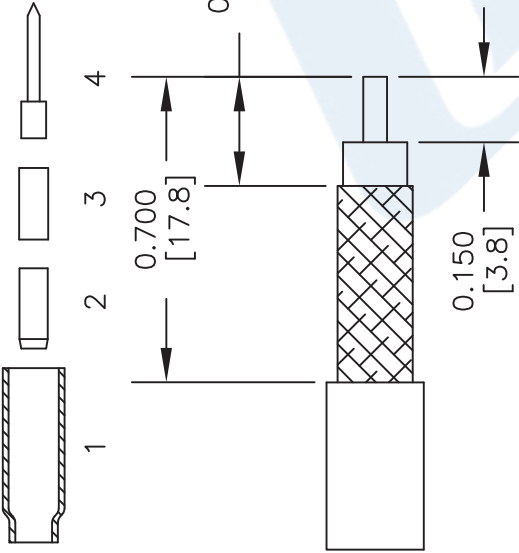
- Values at +25 °C, sea level

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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Banana Plug Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE45164](http://www.Pasternack.com/banana-plug-rg188-ds-rg316-ds-connector-pe45164-p.aspx)

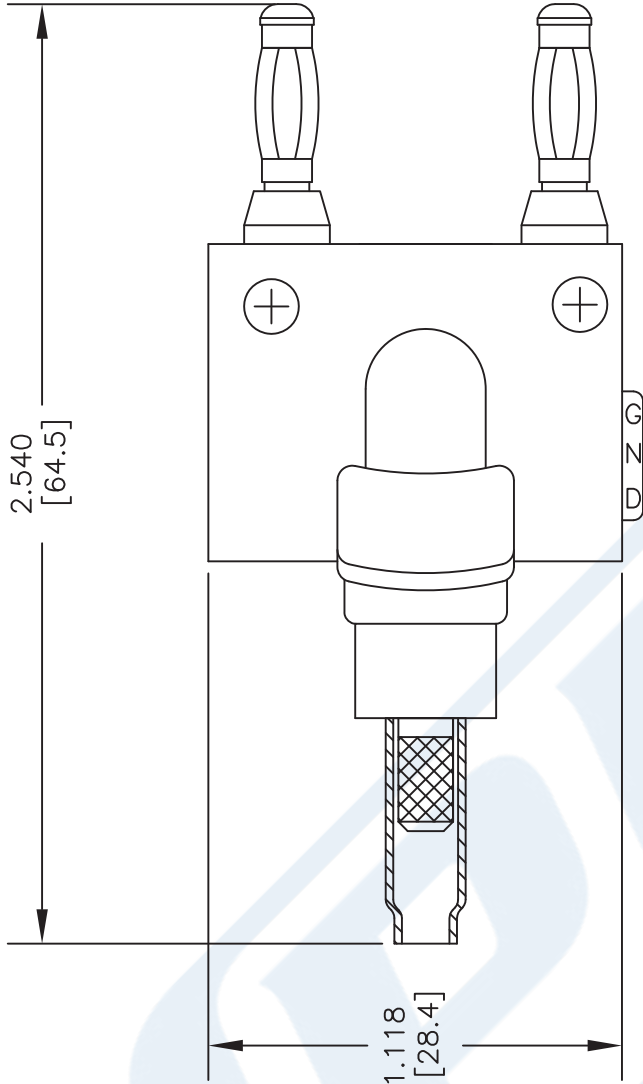
URL: <http://www.pasternack.com/banana-plug-rg188-ds-rg316-ds-connector-pe45164-p.aspx>

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STRIPPING DIMENSIONS  
ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE (1) ONTO CABLE.
2. FLARE END OF CABLE BRAID & SLIDE METAL SPACER (2) & PTFE (3) SPACER OVER CABLE DIELECTRIC.
3. THE CONTACT (4) SHOULD BUTT AGAINST THE DIELECTRIC & PTFE SPACER. CRIMP CONTACT TO CABLE CENTER CONDUCTOR.
4. INSTALL CABLE ASSEMBLY INTO BODY SO THAT THE INNER FERRULE PORTION OF BODY SLIDES UNDER BRAID. PUSH CABLE ASSEMBLY FORWARD UNTIL CONTACT SITS IN PLACE. SLIDE FERRULE OVER BRAID AND UP AGAINST CONNECTOR BODY & CRIMP.



CRIMP SIZE REQUIRED

CONTACT: .068" HEX CRIMP TOOL  
FERRULE: .178" HEX CRIMP TOOL

DWG TITLE

PE45164

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  4. FITS MIL-C-17 AND EQUIVALENT CABLES.

Website: [www.pasternack.com](http://www.pasternack.com) | E-Mail: [sales@pasternack.com](mailto:sales@pasternack.com)

**PE PASTERNAK**  
THE ENGINEER'S RF SOURCE

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FSCM NO. 53919

CAD FILE

031815

SCALE N/A

SIZE A

2233

Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket

TECHNICAL DATA SHEET

RG316-DS

Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket

**Configuration**

|                                      |  |
|--------------------------------------|--|
| Inner Conductor Material and Plating | Copper Clad Steel, Silver                              |
| Dielectric Type                      | PTFE   |
| Shield Materials                     | Silver Plated Copper Braid, Silver Plated Copper Braid |
| Jacket Material and Color            | FEP, Tan   |

**Electrical Specifications**

|                                  |              |
|----------------------------------|--------------|
| Impedance, Ohms                  | 50           |
| Velocity of Propagation, %       | 70           |
| Maximum Operating Frequency, GHz | 3            |
| Capacitance, pF/ft [pF/m]        | 29.4 [96.46] |
| Maximum Operating Voltage, Volts | 1,200        |

**Electrical Specifications by Frequency**

**Frequency 1**

|                                 |           |
|---------------------------------|-----------|
| Frequency, MHz                  | 100       |
| Attenuation, dB/100ft [dB/100m] | 8 [26.25] |

**Frequency 2**

|                                 |              |
|---------------------------------|--------------|
| Frequency, MHz                  | 400          |
| Attenuation, dB/100ft [dB/100m] | 16.2 [53.15] |

**Frequency 3**

|                                 |              |
|---------------------------------|--------------|
| Frequency, MHz                  | 1000         |
| Attenuation, dB/100ft [dB/100m] | 26.1 [85.63] |

**Frequency 4**

|                                 |               |
|---------------------------------|---------------|
| Frequency, GHz                  | 3             |
| Attenuation, dB/100ft [dB/100m] | 46.7 [153.22] |

**Mechanical Specifications**

**Temperature**

|                        |             |
|------------------------|-------------|
| Operating Range, deg C | -55 to +200 |
|------------------------|-------------|

**Inner Conductor**

|                   |                   |
|-------------------|-------------------|
| Number of Strands | 7                 |
| Material          | Copper Clad Steel |
| Plating           | Silver            |
| Diameter, in [mm] | 0.02 [0.51]       |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

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## Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket

## TECHNICAL DATA SHEET

RG316-DS

**Dielectric:**

|                   |             |
|-------------------|-------------|
| Type              | PTFE        |
| Diameter, in [mm] | 0.06 [1.52] |

**Shield:**

|                   |                            |
|-------------------|----------------------------|
| Number of         | 2                          |
| Material 1        | Silver Plated Copper Braid |
| Material 2        | Silver Plated Copper Braid |
| Diameter, in [mm] | 0.096 [2.44]               |

**Jacket:**

|                                       |              |
|---------------------------------------|--------------|
| Material                              | FEP          |
| Diameter, in [mm]                     | 0.114 [2.9]  |
| Color                                 | Tan          |
| One Time Minimum Bend Radius, in [mm] | 0.59 [14.99] |
| Weight, lbs/ft [Kg/m]                 | 0.016 [0.02] |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

|                |     |
|----------------|-----|
| RoHS Compliant | Yes |
|----------------|-----|

**Plotted and Other Data**

|        |                            |
|--------|----------------------------|
| Notes: | Values at 25 °C, sea level |
|--------|----------------------------|

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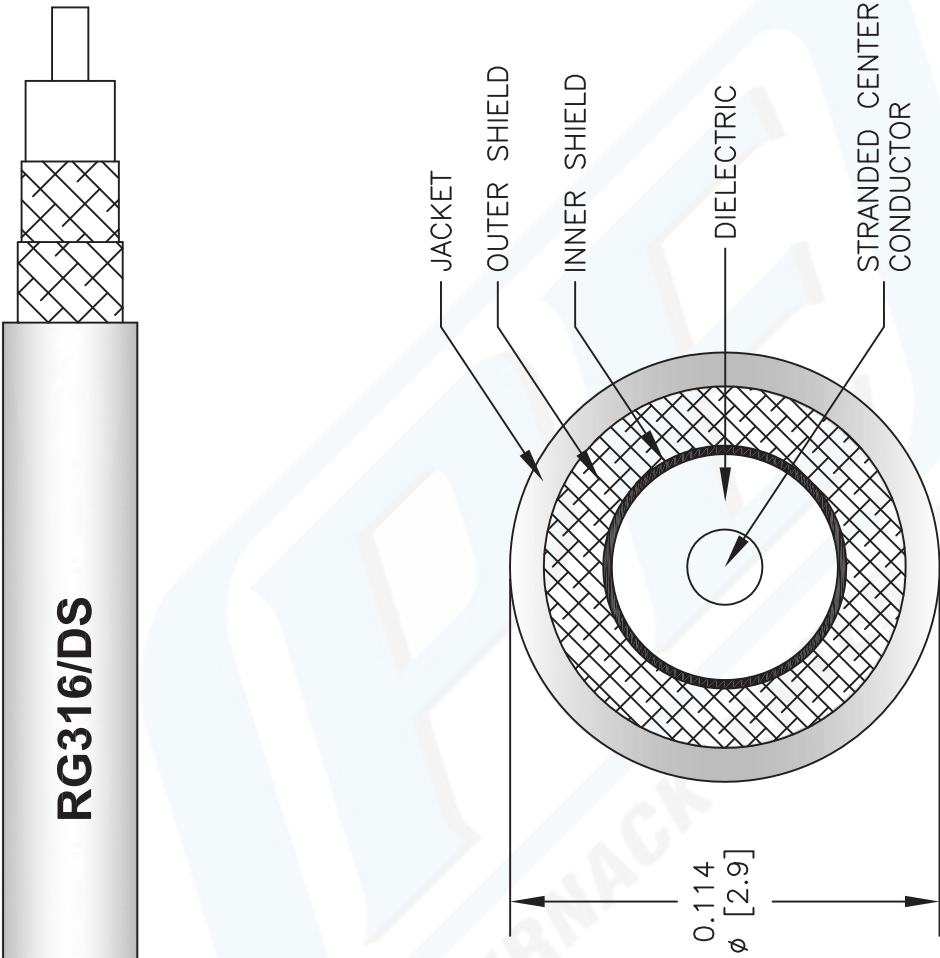
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

URL: <http://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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RG316-DS CAD Drawing

Flexible RG316 Coax Cable Double Shielded with Tan FEP Jacket



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DWG TITLE

RG316-DS

FSCM NO. 53919

2233

SIZE A

SCALE N/A

CAD FILE 041812-B

**PASTERNACK®**

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