



## SMA Male Right Angle Connector Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

PE4409

#### Configuration

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

#### Features

- Max. Operating Frequency 3 GHz
- Good VSWR of 1.4:1
- Gold Plated Brass Contact
- 50 µin minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4409 SMA male right angle connector with solder/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 3 GHz and offers good VSWR of 1.4:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector PE4409 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			1.4:1	
Operating Voltage (AC)			335	Vrms

#### Mechanical Specifications

##### Size

Length	0.673 in [17.09 mm]
Width/Dia.	0.312 in [7.92 mm]
Height	0.731 in [18.57 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 Right Angle Connector Solder Attachment for RG188-DS, RG316-DS PE4409](#)



## SMA Male Right Angle Connector Solder Attachment for RG188-DS, RG316-DS

### RF Connectors Technical Data Sheet

PE4409

#### 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

#### Environmental Specifications

##### Temperature

Operating Range

-40 to +85 deg C

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

#### Plotted and Other Data

Notes:

SMA Male Right Angle Connector 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.

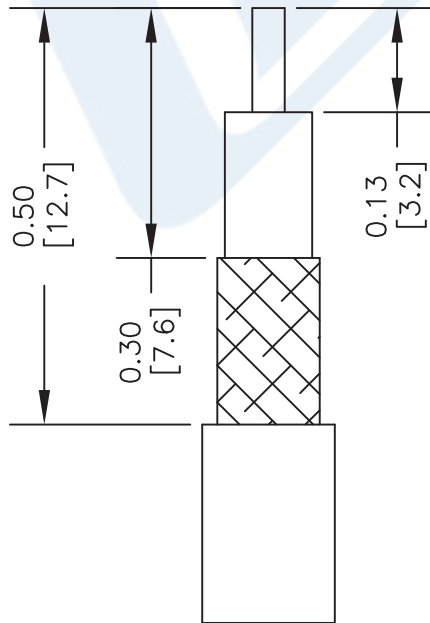
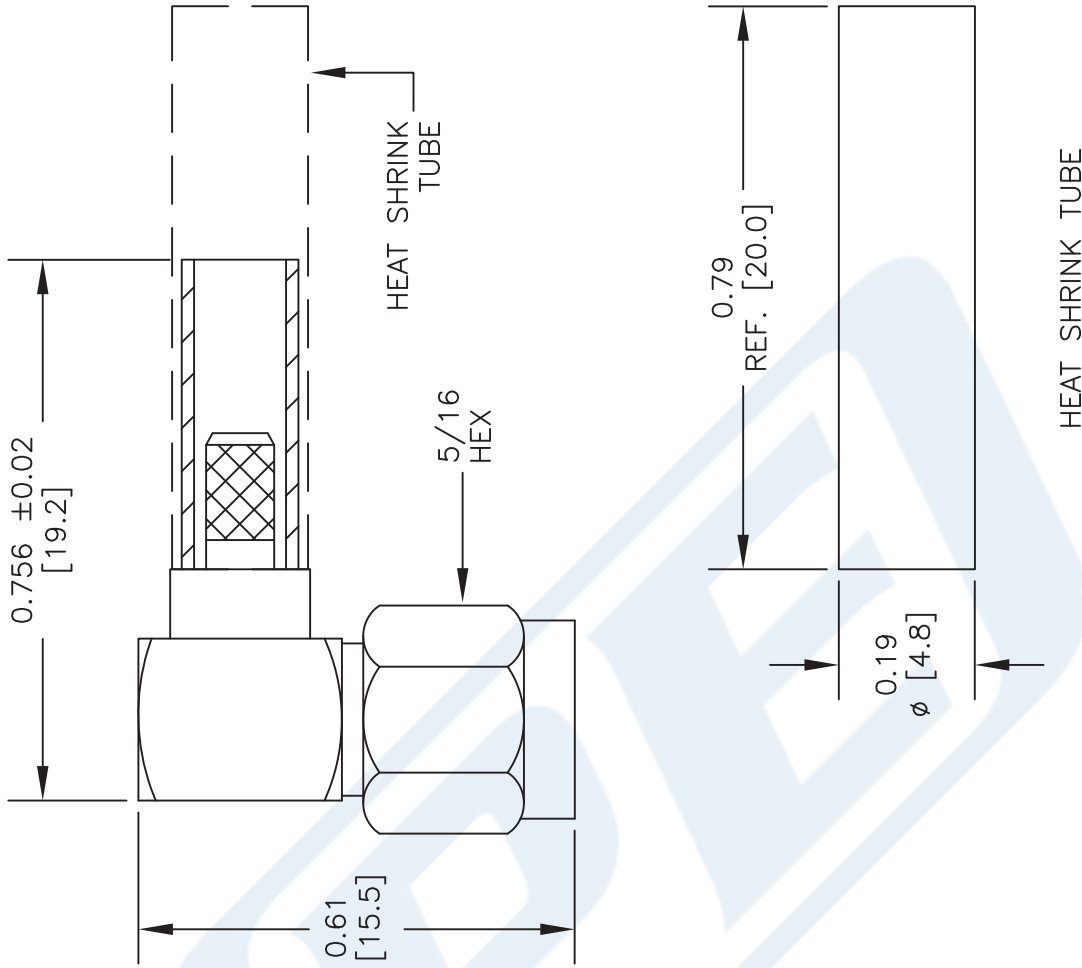
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Solder Attachment for RG188-DS, RG316-DS PE4409](#)

URL: <https://www.pasternack.com/sma-male-standard-rg188-ds-rg316-ds-connector-pe4409-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.

# PE4409 CAD Drawing

SMA Male Right Angle Connector Solder Attachment for RG188-DS, RG316-DS



## STRIPPING DIMENSIONS

## ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE OVER CABLE.
2. INSTALL CABLE INTO BODY OF CONNECTOR AND SOFT SOLDER CENTER CONDUCTOR IN PLACE.
3. SOLDER FERRULE & PRESS CAP DOWN.

DWG TITLE

**PE4409**

- 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.

FSCM NO. 53919

CAD FILE 081313

SCALE N/A

SIZE A

2233



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## TNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG188-DS, RG316-DS, .480 inch D Hole

### RF Connectors Technical Data Sheet

PE45177

#### Configuration

- TNC Female Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- RG188-DS, RG316-DS Interface Type
- Crimp/Solder Attachment
- Bulkhead

#### Features

- Max. Operating Frequency 1,000 MHz
- Gold Plated Brass Contact
- 30μ in. minimum contact plating

#### Applications

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

#### Description

Pasternack's PE45177 TNC female bulkhead connector with crimp/solder attachment for RG188-DS and RG316-DS (.480 inch D hole) is part of our full line of RF components available for same-day shipping. Our TNC female connector operates up to a maximum frequency of 1,000 MHz. This TNC 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 TNC female bulkhead connector PE45177 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		1.5:1		
Operating Voltage (AC)			500	Vrms

#### Mechanical Specifications

<b>Size</b>	
Length	1.425 in [36.2 mm]
Width/Dia.	0.689 in [17.50 mm]
Weight	0.041 lbs [18.6 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG188-DS, RG316-DS, .480 inch D Hole PE45177](#)



TNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG188-DS, RG316-DS, .480 inch D Hole

RF Connectors Technical Data Sheet

PE45177

**Material Specifications**

Description	Material	Plating
Contact	Brass	Gold 30µ in. minimum
Insulation	Teflon	
Body	Brass	Nickel 100µ in. minimum

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 deg C

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

**Plotted and Other Data**

Notes:

**Assembly Instruction**

TNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG188-DS, RG316-DS, .480 inch D Hole 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.

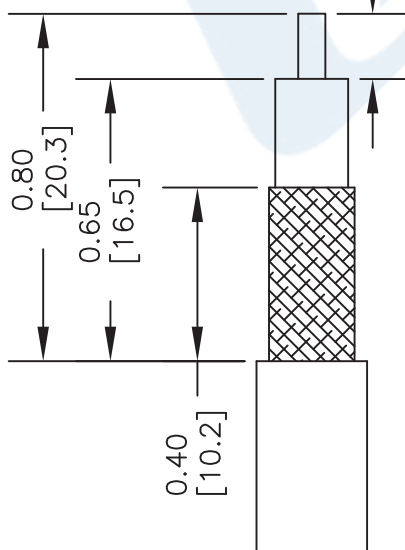
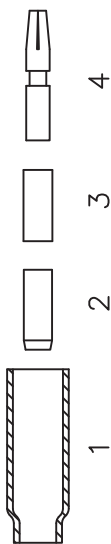
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [TNC Female Bulkhead Mount Connector Crimp/Solder Attachment for RG188-DS, RG316-DS, .480 inch D Hole PE45177](#)

URL: <https://www.pasternack.com/tnc-female-rg188-ds-rg316-ds-connector-pe45177-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.

# PE45177 CAD Drawing

TNC Female Bulkhead Mount Connector Crimp/Solder Attachment  
for RG188-DS, RG316-DS, .480 inch D Hole

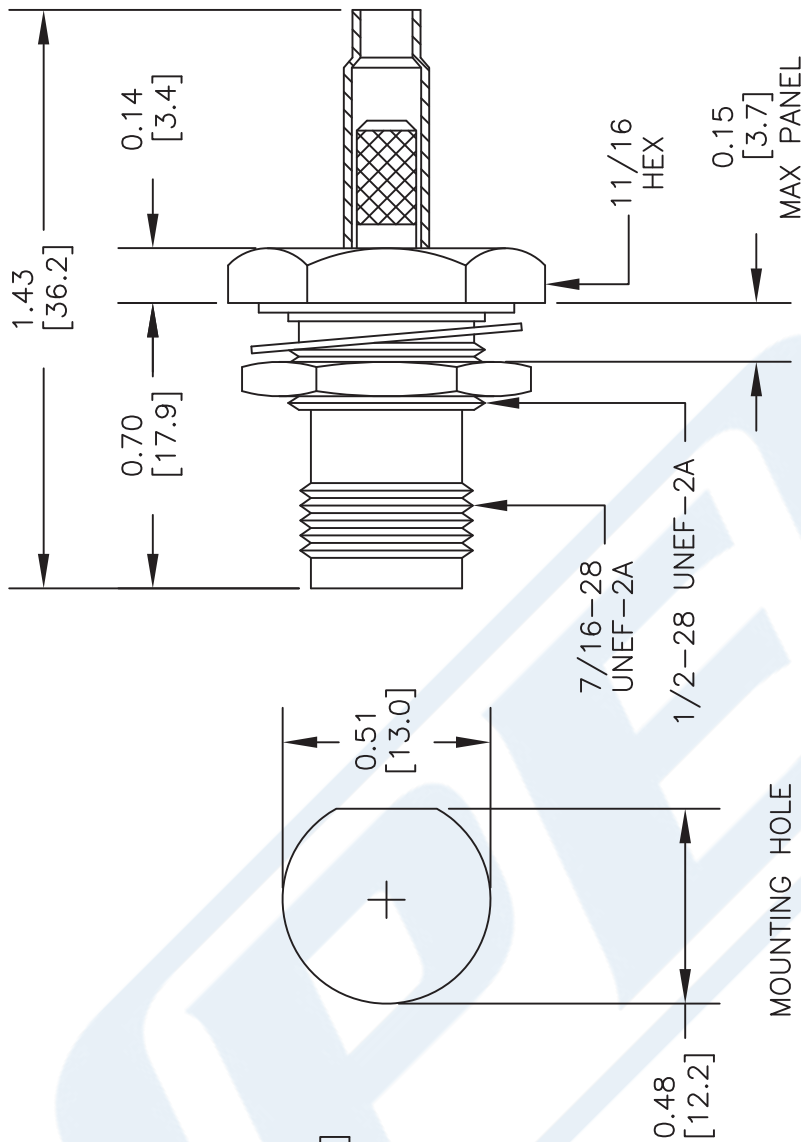


### STRIPPING DIMENSIONS ASSEMBLY PROCEDURES

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 IS IN THE RIGHT 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

**PE45177**

FSCM NO. 53919

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  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.

CAD FILE 031715

SCALE N/A

SIZE A

2233

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

## RF Cables Technical Data Sheet

RG316-DS

### Configuration

- Flexible Cable
- 2 Shield(s)

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
Impedance		50		Ohms
Velocity of Propagation		70		%
Operating Voltage (AC)			1,200	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	11.5	17.2	30	54.5		dB/100ft
	37.73	56.43	98.43	178.81		dB/100m
Input Power (CW), Max	430	210	130			Watts

### Mechanical Specifications

Diameter	0.114 in [2.9 mm]
Weight	0.015 lbs/ft [0.02 Kg/m]
Min. Bend Radius (Repeated)	0.591 in [15.01 mm]

### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper Clad Steel, Silver7	0.02 in 0.51 mm
Conductor Type	Stranded	
Dielectric	PTFE	0.06 in 1.52 mm
First Shield	Silver Plated Copper Braid	

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

Flexible RG316-DS Coax Cable Double  
Shielded with Tan FEP Jacket

RF Cables  
Technical Data Sheet

RG316-DS

Second Shield	Silver Plated Copper Braid	0.094 in 2.39 mm
Jacket	FEP, Tan	0.114 in [2.9 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 RG316-DS Coax Cable Double 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 RG316-DS Coax Cable Double Shielded with Tan FEP Jacket RG316-DS](#)

URL: <https://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-DS Coax Cable Double Shielded with Tan FEP Jacket

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.1	PCR RG316-DS 20190701	07/15/19	S.ELLIS



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	±.132
.XX±.01 [.25]	±.132
.XXX±.005 [0.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SIZE [CAGE] DRAWN BY PART NUMBER REV  
A 53919 K.Dang RG316-DS A

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SHEET 1	OF 1
SCALE N/A	

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