



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

## RF Connectors Technical Data Sheet

PE4402

### Configuration

- SMA Male Connector
- MIL-STD-348A
- 50 Ohms
- Straight Body Geometry
- Connector Interface Types: RG188-DS, RG316-DS
- 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 PE4402 SMA male 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 12.4 GHz and offers excellent VSWR of 1.21:1.

Our SMA male connector PE4402 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	0.87 in [22.1 mm]
Width/Dia.	0.313 in [7.95 mm]
Weight	0.012 lbs [5.44 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 RG188-DS, RG316-DS PE4402](#)



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

### RF Connectors Technical Data Sheet

PE4402

#### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 30 µin minimum
Insulation	PTFE	
Body	Brass	Nickel 100 µin minimum
Coupling Nut	Brass	Gold 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 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 99.4% 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 RG188-DS, RG316-DS PE4402](#)

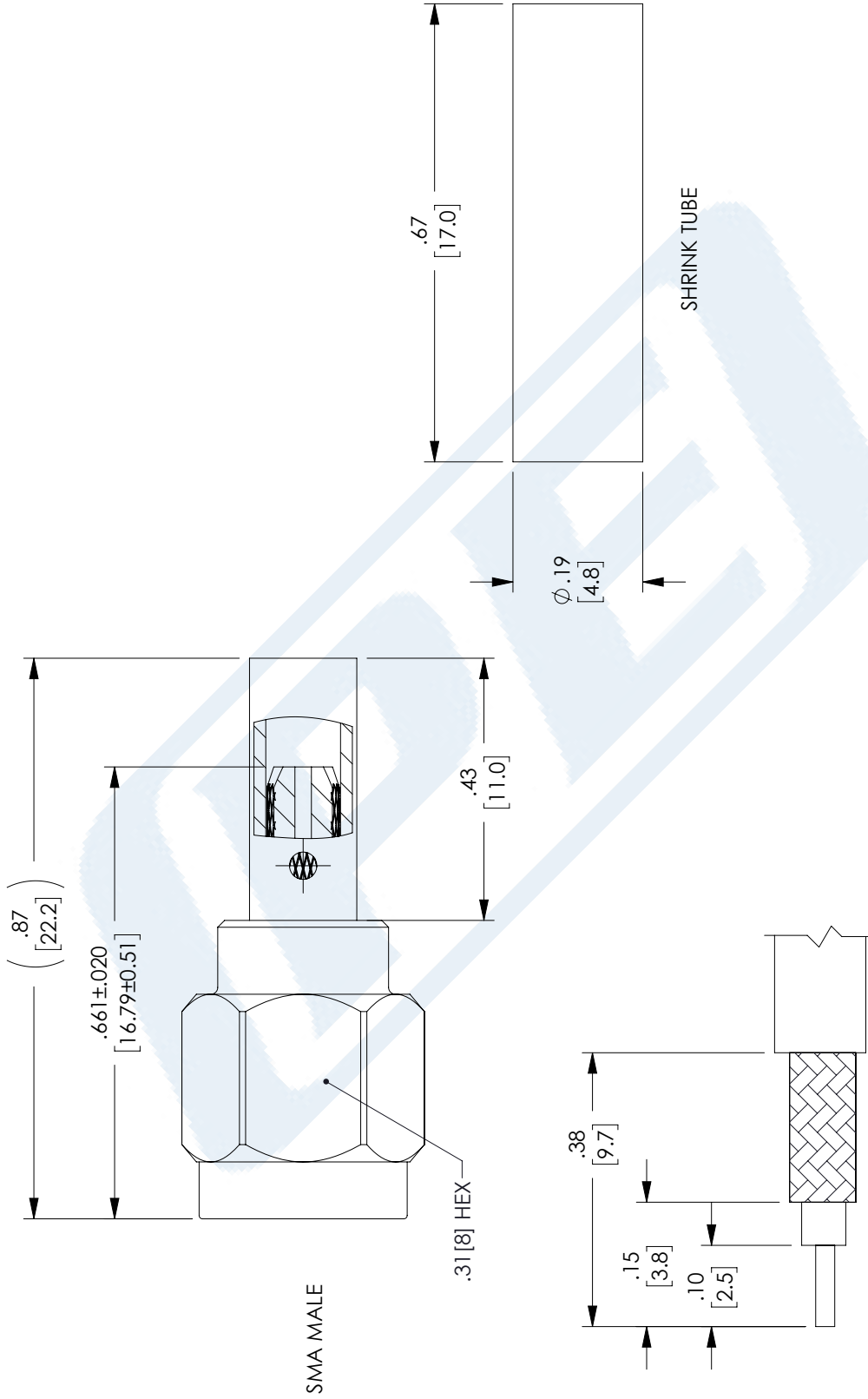
URL: <https://www.pasternack.com/sma-male-standard-rg188-ds-rg316-ds-connector-pe4402-p.aspx>

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.

# PE4402 CAD Drawing

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

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE4402 20220520	06/02/2022	AGANWANI



### STRIPPING DIMENSIONS

CONTACT: SOLDER  
FERRULE: SOLDER

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

TOLERANCES:  
.X = ±.2 [5.08] | FRACTIONS ± 1/32  
.XX = ±.02 [.51] | ANGLES ± 1°  
.XXX = ±.005 [.13]

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.

**PE PASTERNAK**  
an INFINITE brand

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THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
SCALE N/A

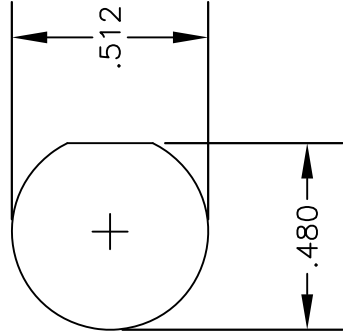
REV B  
ITEM NO. PE4402

SIZE A | CAGE CODE 53919 | DRAWN BY DFRISIELLO

**MATERIALS**

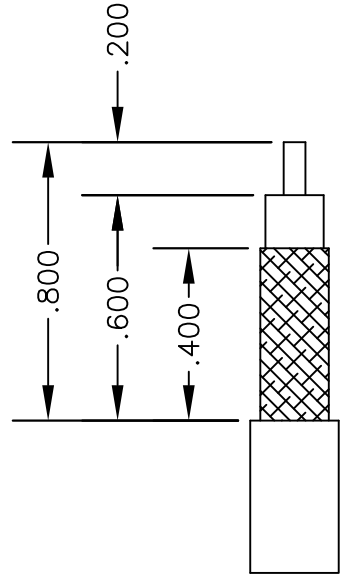
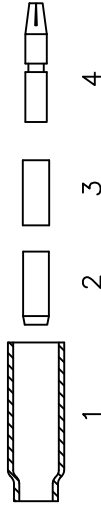
<b>BODY</b>	<b>BRASS NICKEL PLATED</b>
<b>CONTACT</b>	<b>GOLD PLATED</b>
<b>INSULATOR</b>	<b>PTFE</b>

MOUNTING HOLE



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.



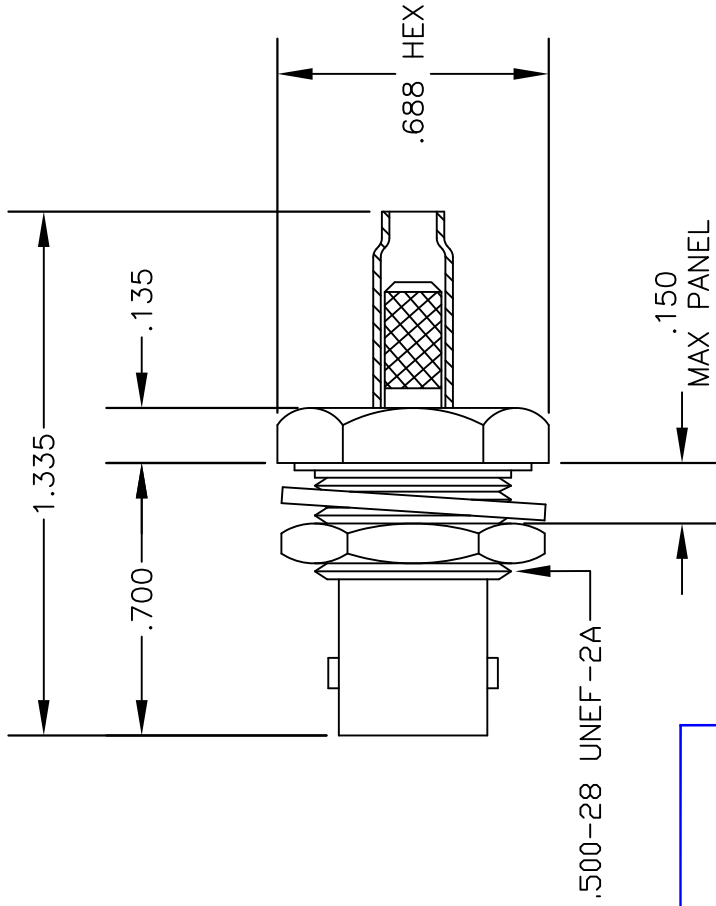
STRIPPING DIMENSIONS

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 SNAPS INTO PLACE. SLIDE FERRULE OVER BRAID AND UP AGAINST CONNECTOR BODY & CRIMP.

CRIMP SIZES REQUIRED

CONTACT: .068" HEX CRIMP TOOL

FERRULE: .178" HEX CRIMP TOOL



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 E-MAIL ADDRESS: sales@pasternack.com  
**COAXIAL & FIBER OPTICS**

DWG TITLE

**PE4392**

DES. BNC FEMALE, BULKHEAD, CRIMP ATTACHMENT FOR RG188-DS & RG316-DS

REV. A FSCM NO. 53919

CAD FILE 042210

SCALE N/A

SIZE A

147

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.

## 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		69.5		%
Shielding Effectiveness	85			dB
Operating Voltage (AC)			1,200	Vrms
Inner Conductor DC Resistance			83.82	Ohms/1000ft
Outer Conductor DC Resistance			5.33	Ohms/1000ft
Nominal Capacitance		28.96 [95.01]		pF/ft [pF/m]
Insulation Resistance	304.8			MOhms/1000ft

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.4	1	2	3	GHz
Attenuation, Max	10.97	20.97	37.95	45.05	57.94	dB/100ft
	35.99	68.8	124.51	147.8	190.09	dB/100m
Attenuation, Typ	8.29	17.5	29	39.41	53.55	dB/100ft
	27.2	57.41	95.14	129.3	175.69	dB/100m
Input Power (CW), Max	375	185	120	85	65	Watts

#### Mechanical Specifications

Diameter	0.114 in [2.9 mm]
Weight	0.015 lbs/ft [0.02 Kg/m]
Min. Bend Radius (Installation)	0.59 in [14.99 mm]
Min. Bend Radius (Repeated)	1.57 in [39.88 mm]

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

#### 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	
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

Storage Range

0 to +40 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](#)

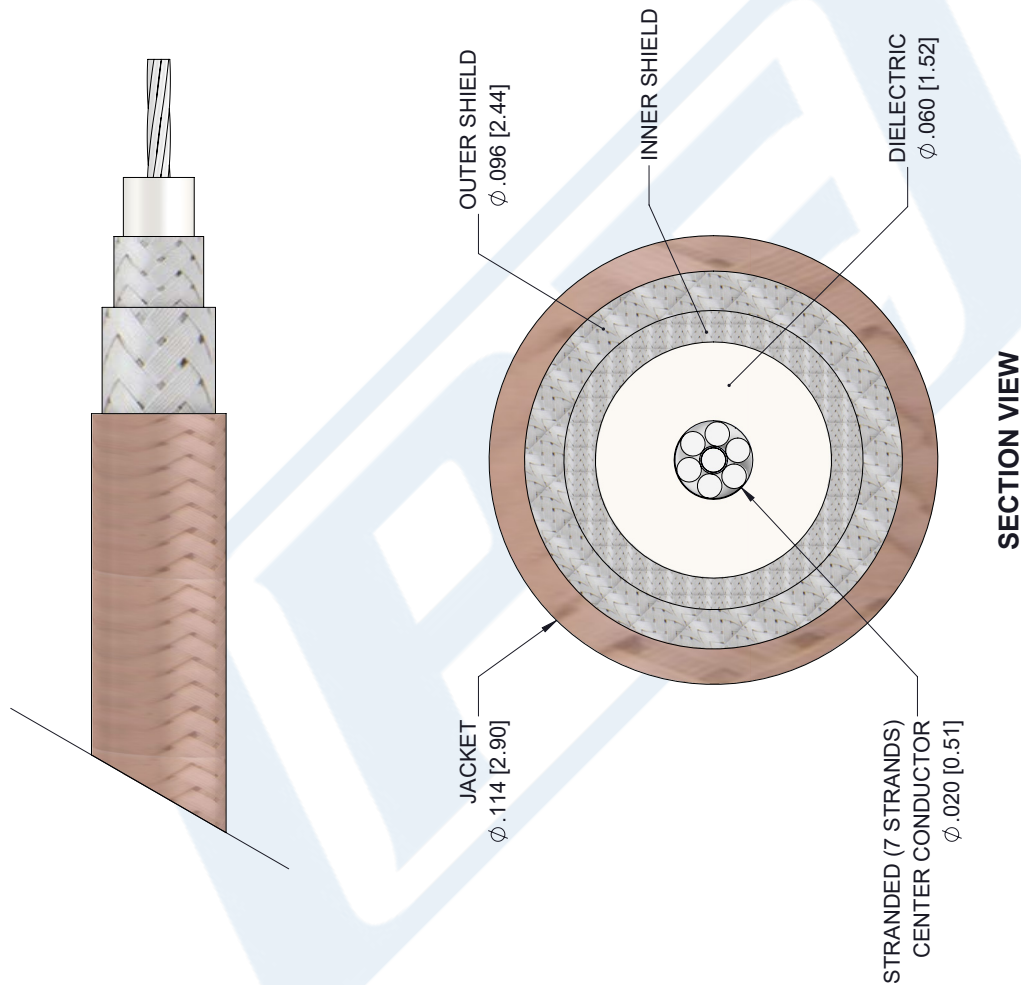
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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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:	
X±.2 [5.08]	FRACTIONS ±.132
.XX±.01 [.25]	±.132
.XXX±.005 [.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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