



N Female Bulkhead Mount Connector Clamp/Solder  
Attachment for RG188-DS, RG316-DS, .640 inch DD Hole

TECHNICAL DATA SHEET

PE45173

**Configuration**

Connector	N Female
Connector Interface Type	RG188-DS, RG316-DS
Attachment Method (Shield/Contact)	Clamp/Solder
Body Style	Straight
Mount Method	Bulkhead

**Electrical Specifications**

Impedance	50 Ohms
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**Mechanical Specifications**

**Size**

Length	1.67 in [42.42 mm]
Width/Dia.	0.8 in [20.32 mm]
Weight	0.11 lbs [49.9 g]

**Connector**

Type	N Female
Body Material and Plating	Brass, Nickel

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

RoHS Compliant

**Plotted and Other Data**

Notes:

- Values at +25 °C, sea level

N Female Bulkhead Mount Connector Clamp/Solder Attachment for RG188-DS, RG316-DS, .640 inch DD Hole 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: [N Female Bulkhead Mount Connector Clamp/Solder Attachment for RG188-DS, RG316-DS, .640 inch DD Hole PE45173](http://www.pasternack.com/n-female-rg188-ds-rg316-ds-connector-pe45173-p.aspx)

URL: <http://www.pasternack.com/n-female-rg188-ds-rg316-ds-connector-pe45173-p.aspx>

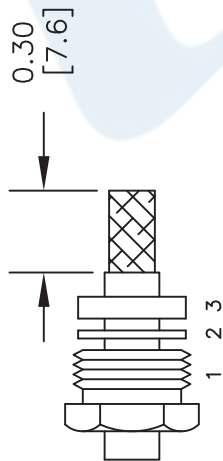
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# PE45173 CAD Drawing

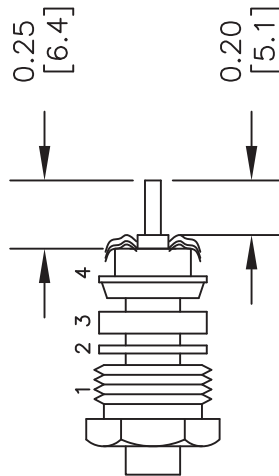
N Female Bulkhead Mount Connector Clamp/Solder Attachment  
for RG188-DS, RG316-DS, .640 inch DD Hole

## ASSEMBLY PROCEDURES

1. SLIDE CLAMP NUT (1), WASHER (2) & GASKET (3) OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TAPER END OF BRAID TO PERMIT ASSEMBLY OF BRAID CLAMP (4). SLIDE BRAID CLAMP (4) OVER BRAID & SEAT AGAINST CABLE.

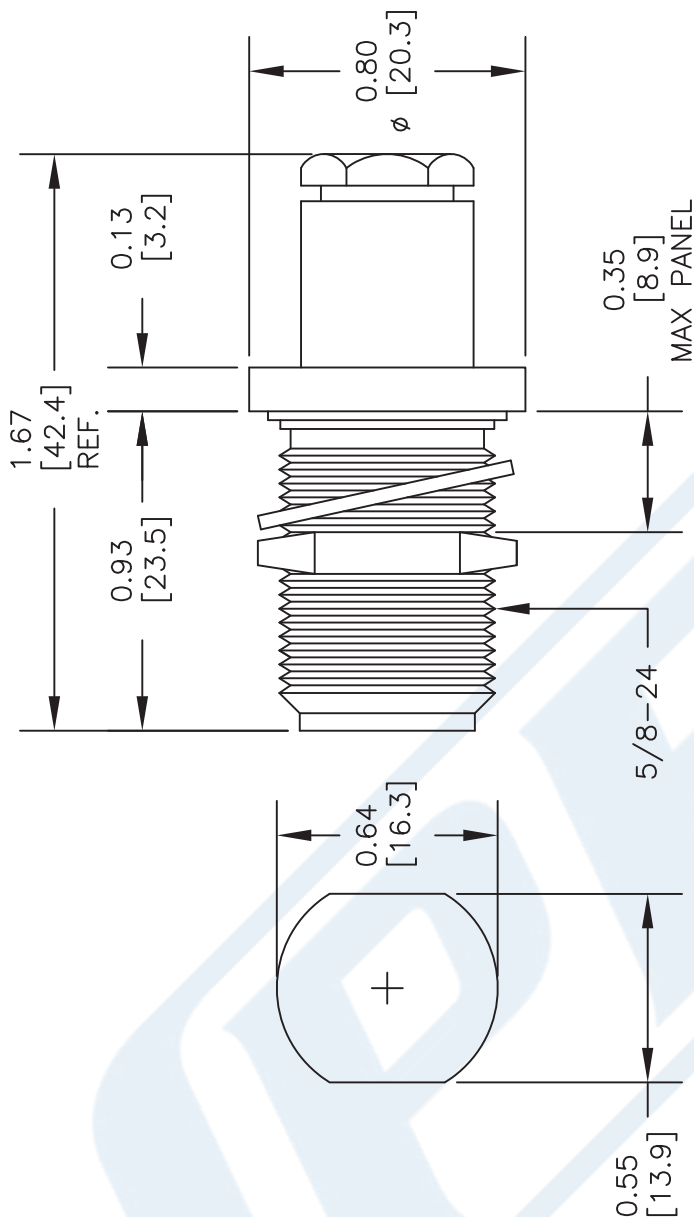


2. FORM BRAID OVER CLAMP NUT (4). TRIM BRAID BACK TO SHOULDER. CUT DIELECTRIC & CENTER CONDUCTOR TO DIMENSION SHOWN. DO NOT NICK CENTER CONDUCTOR. SOLDER CONTACT TO CENTER CONDUCTOR. REMOVE EXCESS SOLDER. DO NOT OVER HEAT DIELECTRIC. INSERT CABLE ASSEMBLY INTO BODY & TIGHTEN.



## NOTE

INSERT PTFE BEFORE CONTACT. WITH LARGE OPEN END SLIDING OVER CENTER CONDUCTOR & DIELECTRIC.



DWG TITLE

**PE45173**

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 031815

SCALE N/A

SIZE A

2233

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

Pasternack Enterprises, Inc.  
P.O. Box 16759 | Irvine | CA | 92623  
Phone: (949) 261-1920 | Fax: (949) 261-7451  
Website: www.pasternack.com | E-Mail: sales@pasternack.com



## 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
- 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 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	0.941 in [23.9 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 30 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 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 99.4% 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 Crimp/Solder Attachment for RG188-DS, RG316-DS PE4401](#)

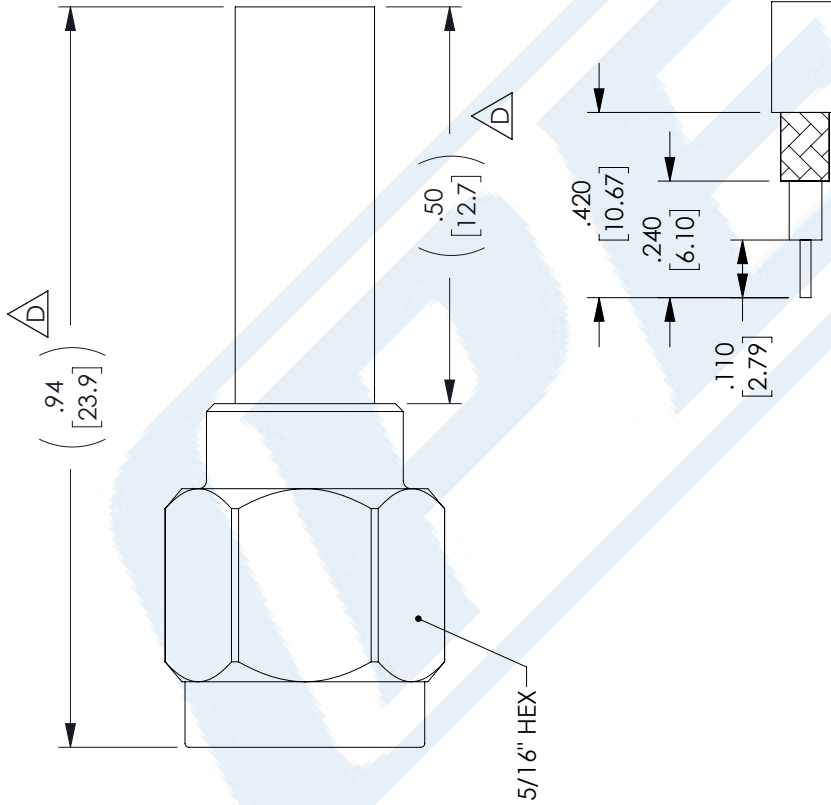
URL: <https://www.pasternack.com/sma-male-rg188-ds-rg316-ds-connector-pe4401-p.aspx>

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# PE4401 CAD Drawing

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

REVISIONS		
REV.	DESCRIPTION	DATE
D	PCR PE4401 20220705; 94 WAS .87, ADDED .50 DIM.	06/03/2021
		AGANWANI



RECOMMENDED STRIPPING DIMENSIONS

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%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

NOTES:  
 CRIMP SIZES REQUIRED -  
 CONTACT: SOLDER  
 FERRULE: .151 [3.83] HEX CRIMP

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Pasternack Enterprises, Inc.  
 P. O. Box 16759, Irvine, CA 92623.  
 Phone: 1.949.261.1920 | 1.866.727.8376  
 Fax: 1.949.261.7451  
 Website: www.pasternack.com  
 E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1  
 SCALE N/A

REV D

ITEM NO. PE4401

CAGE CODE DRAWN BY A 53919 DFRISIELLO

## 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:

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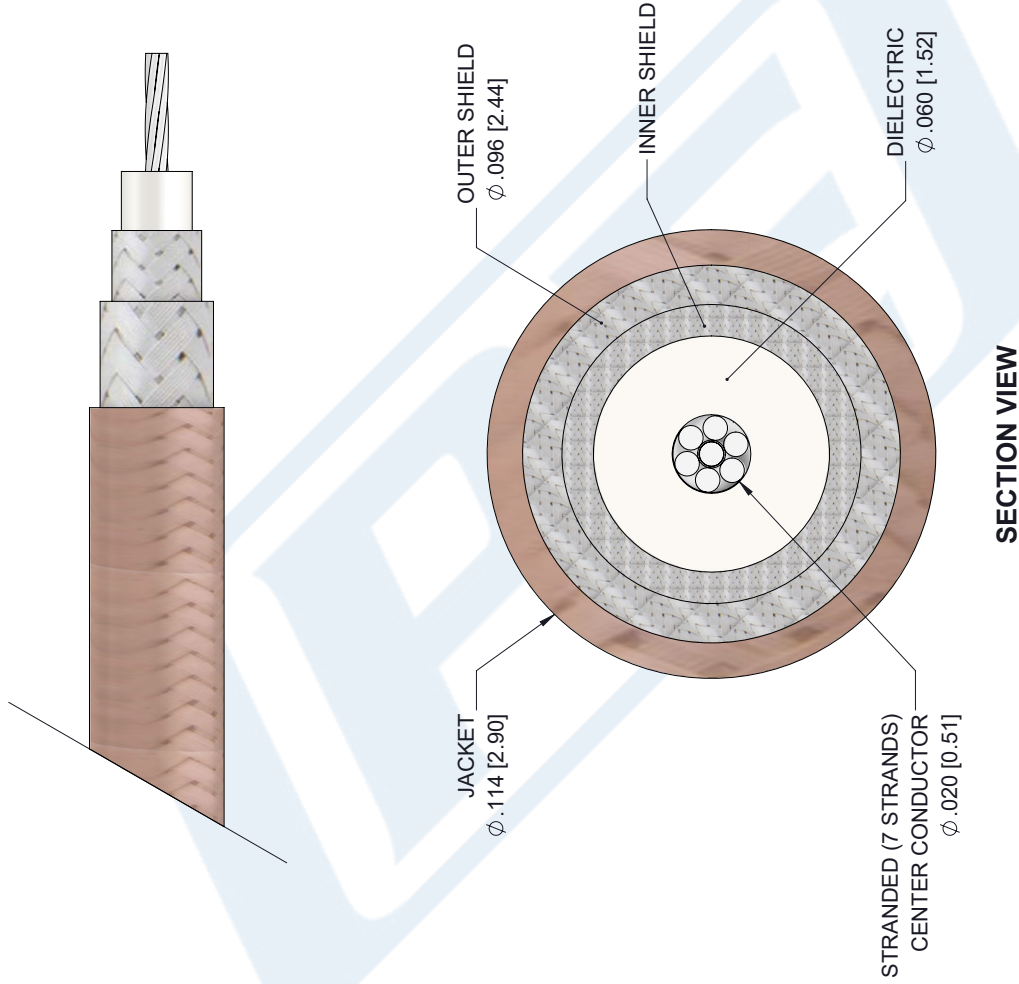
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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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°
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THIRD-ANGLE PROJECTION	

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P.O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
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SHEET 1 OF 1  
SCALE N/A

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

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