



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

### RF Connectors Technical Data Sheet

PE4400

#### 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 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50  $\mu$ m minimum contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's PE4400 SMA male connector with clamp/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 6 GHz and offers good VSWR of 1.3:1.

Our SMA male connector PE4400 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		6	GHz
VSWR			1.3:1	
Operating Voltage (AC)			335	Vrms

#### Mechanical Specifications

##### Size

Length	0.74 in [18.8 mm]
Width/Dia.	0.313 in [7.95 mm]
Weight	0.018 lbs [8.16 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 Clamp/Solder Attachment for RG188-DS, RG316-DS PE4400](#)



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

## RF Connectors Technical Data Sheet

PE4400

### 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

#### Mechanical Specification Notes:

When attaching the connector to the cable use a clamp torque value of 10 to 12 in-lbs [1.13 to 1.36 Nm]

### 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 Clamp/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.

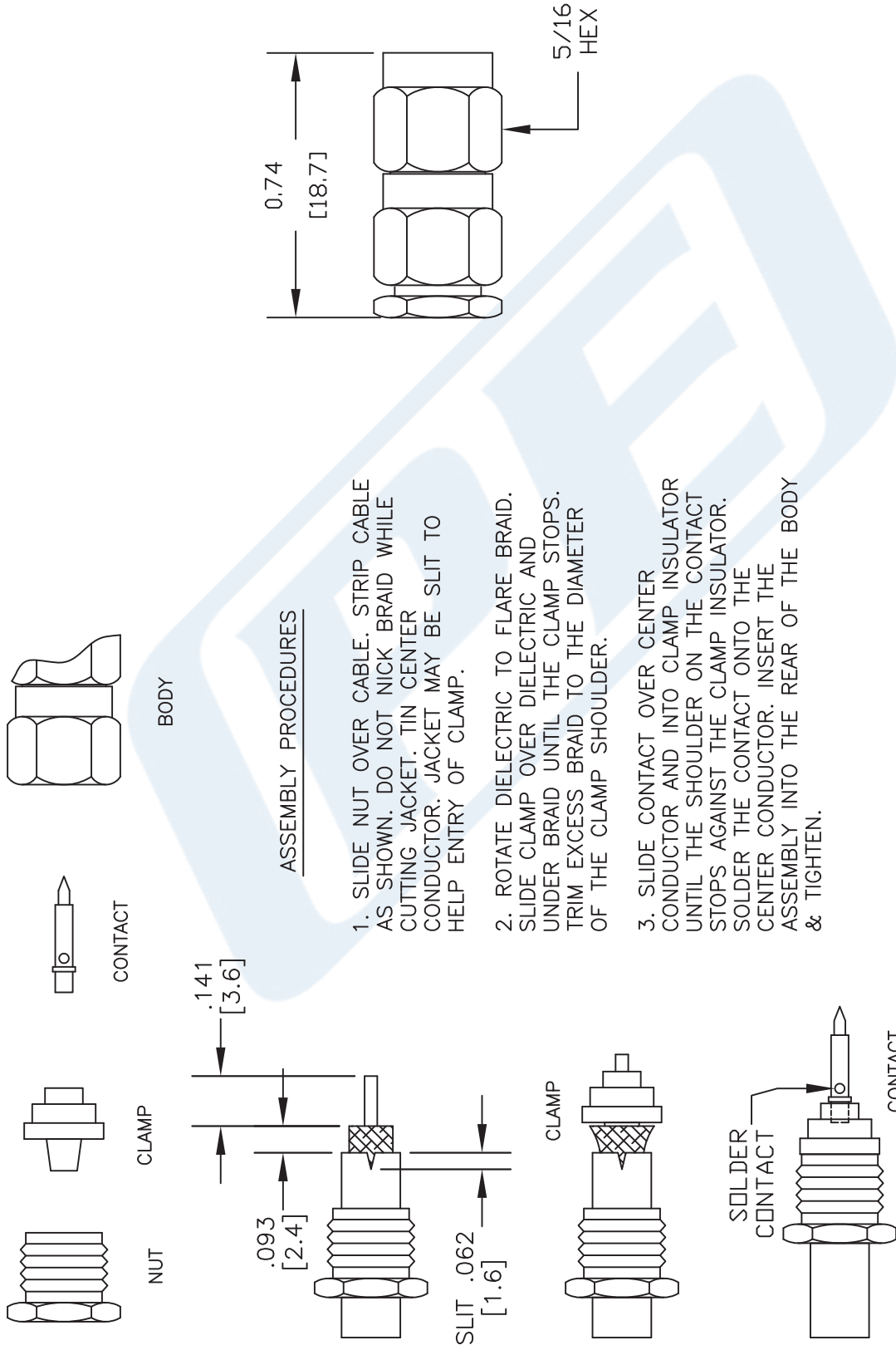
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Connector Clamp/Solder Attachment for RG188-DS, RG316-DS PE4400](#)

URL: <https://www.pasternack.com/sma-male-standard-rg188-ds-rg316-ds-connector-pe4400-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.

# PE4400 CAD Drawing

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



### ASSEMBLY PROCEDURES

1. SLIDE NUT OVER CABLE. STRIP CABLE AS SHOWN. DO NOT NICK BRAID WHILE CUTTING JACKET. TIN CENTER CONDUCTOR. JACKET MAY BE SLIT TO HELP ENTRY OF CLAMP.
2. ROTATE DIELECTRIC TO FLARE BRAID. SLIDE CLAMP OVER DIELECTRIC AND UNDER BRAID UNTIL THE CLAMP STOPS. TRIM EXCESS BRAID TO THE DIAMETER OF THE CLAMP SHOULDER.
3. SLIDE CONTACT OVER CENTER CONDUCTOR AND INTO CLAMP INSULATOR UNTIL THE SHOULDER ON THE CONTACT STOPS AGAINST THE CLAMP INSULATOR. SOLDER THE CONTACT ONTO THE CENTER CONDUCTOR. INSERT THE ASSEMBLY INTO THE REAR OF THE BODY & TIGHTEN.

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].

DWG TITLE  
**PE4400**

**PE PASTERNAK®**  
 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

REV. B	FSCM NO. 53919	CAD FILE 051311	SCALE N/A	SIZE A	2231
--------	----------------	-----------------	-----------	--------	------



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

### RF Connectors Technical Data Sheet

PE45492

#### Configuration

- SSMC Plug Connector
- 50 Ohms

- Straight Body Geometry
- Connector Interface Types: RG188-DS, RG316-DS

#### Features

- Max. Operating Frequency 12.4 GHz
- Good VSWR of 1.5:1
- Gold Plated Beryllium Copper Contact
- Contact plating according to MIL-G-45204
- Reliable threaded coupling

- Small SSMC connector form factor (50% smaller than SMA, radially)
- IEC 60169-20 SSMC connector interface
- In stock and ready to ship

#### Applications

- General Purpose Test
- Custom Cable Assemblies
- Avionics

- A/D Modules
- Data Acquisition
- Software defined radio (SDR)

- RADAR/SONAR
- Ultra Wideband Digital Receivers
- Medical equipment

#### Description

Pasternack's PE45492 SSMC plug 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 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 PE45492 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	
Insertion Loss			0.3	dB
Operating Voltage (AC)			250	Vrms
High Potential Voltage 5 MHz			400	Vrms
Inner Conductor DC Resistance			4	mOhms
Outer Conductor DC Resistance			1	mOhms
Insulation Resistance	1,000			MOhms
RF Leakage	-50			dB

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 RG188-DS, RG316-DS PE45492](#)



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

RF Connectors  
Technical Data Sheet

PE45492

**Mechanical Specifications**

**Size**

Length 0.7 in [17.78 mm]  
Width/Dia. 0.156 in [3.96 mm]

Mating Cycles 500 Cycles  
Mating Torque 1.75 to 2 in-lbs [0.20 to 0.23 Nm]

**Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold MIL-G-45204
Insulation	Teflon	
Body	Beryllium Copper	Gold MIL-G-45204
Coupling Nut	Beryllium Copper	Gold MIL-G-45207
Crimp Sleeve	Brass	Gold MIL-G-45204

**Environmental Specifications**

**Temperature**

Operating Range -65 to +165 deg C  
Shock Method 213, Condition B, 75G @6ms @1/2 sine  
Vibration Method 204, Condition D (20G)  
Salt Spray Method 101, Condition B, 5% salt solution

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

**Plotted and Other Data**

Notes:

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 RG188-DS, RG316-DS PE45492](#)



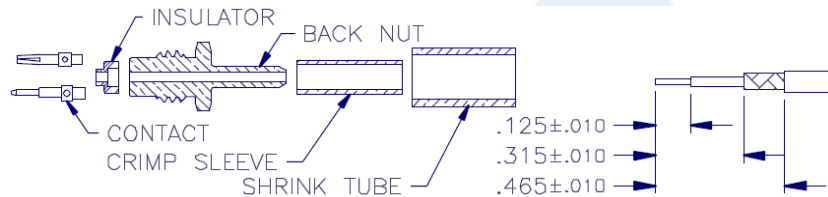
SSMC Plug Connector Crimp/Solder  
Attachment for RG188-DS, RG316-DS

RF Connectors  
Technical Data Sheet

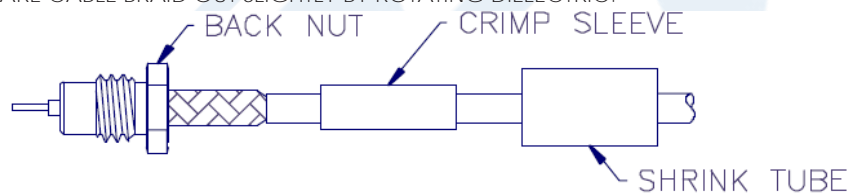
PE45492

**Assembly Instruction**

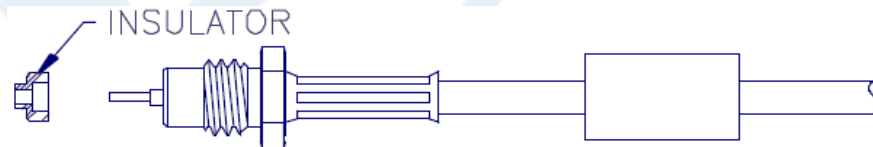
Assembly Instructions



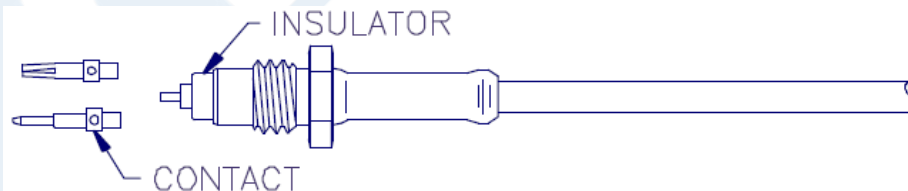
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



4. INSERT CABLE INTO TAIL-END OF BACK NUT, MAKING SURE TAIL GOES OVER DIELECTRIC AND UNDER BRAID. SLIDE IN UNTIL BRAID TOUCHES REAR SURFACE OF NUT.
5. SLIDE CRIMP SLEEVE FORWARD AND USE .105 HEX DIE TO CRIMP.



6. POSITION INSULATOR OVER CABLE DIELECTRIC AND CENTER CONDUCTOR.



7. SOLDER CONTACT TO CENTER CONDUCTOR.
8. INSERT CABLE ASSEMBLY INTO BODY AND TIGHTEN NUT WITH A TORQUE WRENCH WITH A TORQUE OF 35-45 INCH-OUNCES.
9. SLIDE SHRINK TUBE (IF SUPPLIED) OVER CRIMP SLEEVE AND SHRINK TO FIT.

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 RG188-DS, RG316-DS PE45492](#)



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

### RF Connectors Technical Data Sheet

PE45492

SSMC Plug 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: [SSMC Plug Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE45492](https://www.pasternack.com/ssmc-plug-rg188-ds-rg316-ds-connector-pe45492-p.aspx)

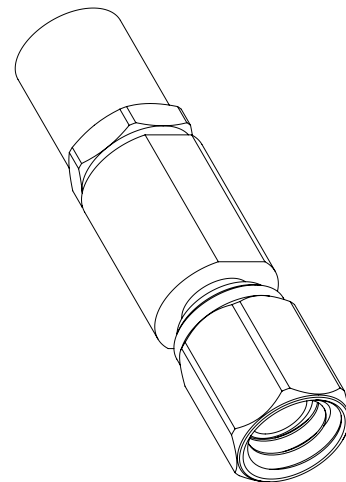
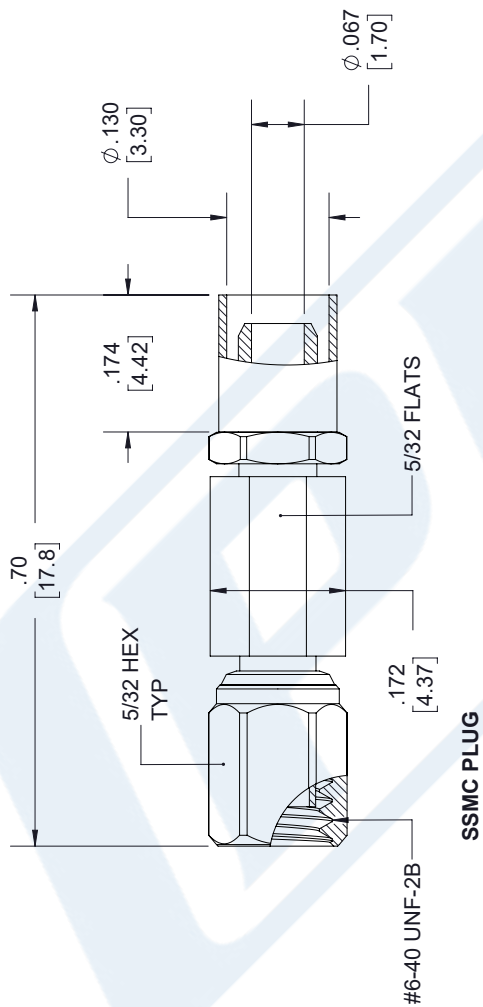
URL: <https://www.pasternack.com/ssmc-plug-rg188-ds-rg316-ds-connector-pe45492-p.aspx>

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.

# PE45492 CAD Drawing

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

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	06/13/19
		APPROVED
		S. ELLIS



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

TOLERANCES:  
X $\pm$  .2 [5.08] FRACTIONS  
XX $\pm$  .01 [ .25]  $\pm$  .132  
XXX $\pm$  .005 [ .13] ANGLES  $\pm$  1°

ALL DIMENSIONS SHOWN  
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

**PE PASTERNAK**  
an INFINITO brand

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

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.

SHEET 1 OF 1  
SCALE N/A

REV A

SIZE A  
CAGE 53919  
DRAWN BY K.DANG  
PART NUMBER PE45492

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

## 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](#)

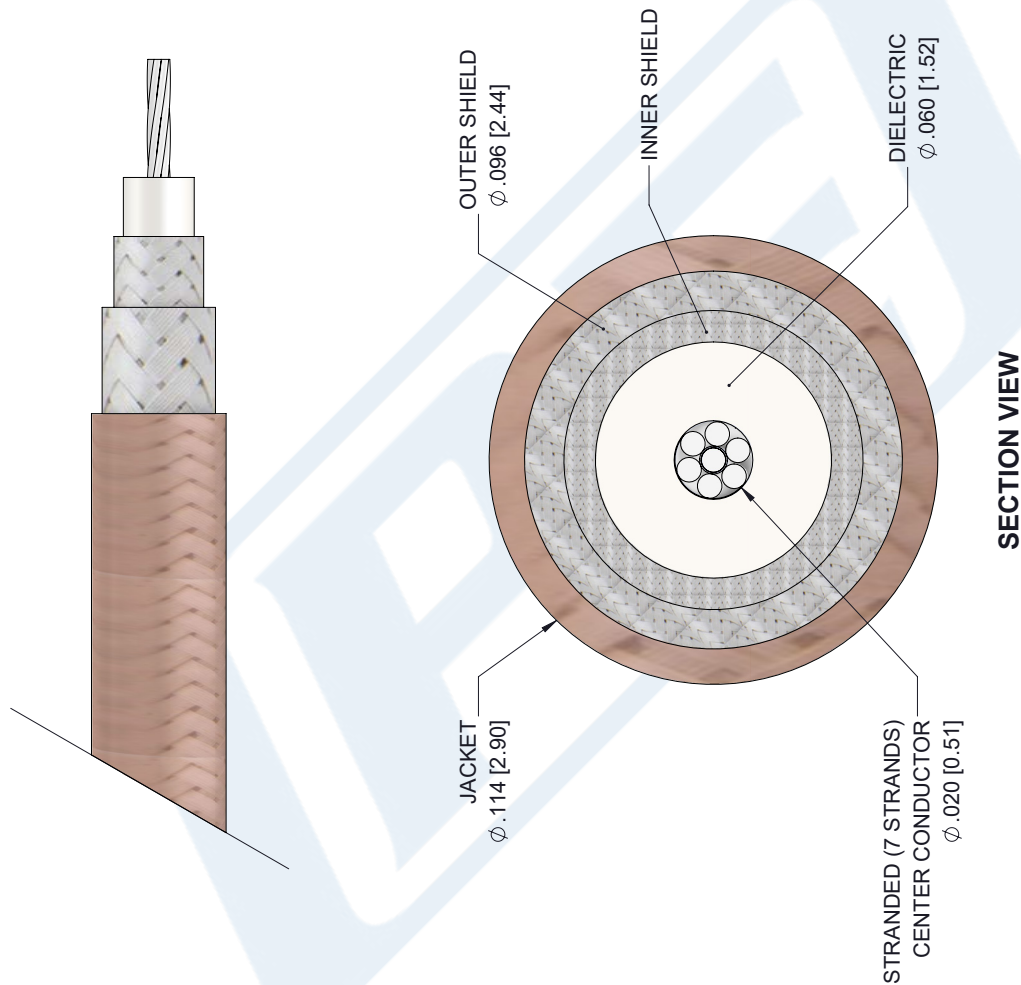
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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.

# 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 [.13]	ANGLES ± 1°
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

**PE PASTERNAK**  
an INFINITO brand

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

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

THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.	
SHEET 1	OF 1
SCALE N/A	

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.