



N Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS

TECHNICAL DATA SHEET

PE45172

Configuration

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

Electrical Specifications

Impedance	50 Ohms
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Mechanical Specifications

Size

Length	1.66 in [42.16 mm]
Width/Dia.	0.625 in [15.88 mm]
Weight	0.068 lbs [30.84 g]

Connector

Type	N Female
Contact Material and Plating	Gold
Body Material and Plating	Brass, Nickel
Dielectric Type	PTFE

Compliance Certifications (visit www.Pasternack.com for current document)

RoHS Compliant	
REACH Compliant	06/18/2012

Plotted and Other Data

Notes:

- Values at +25 °C, sea level

N Female 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.

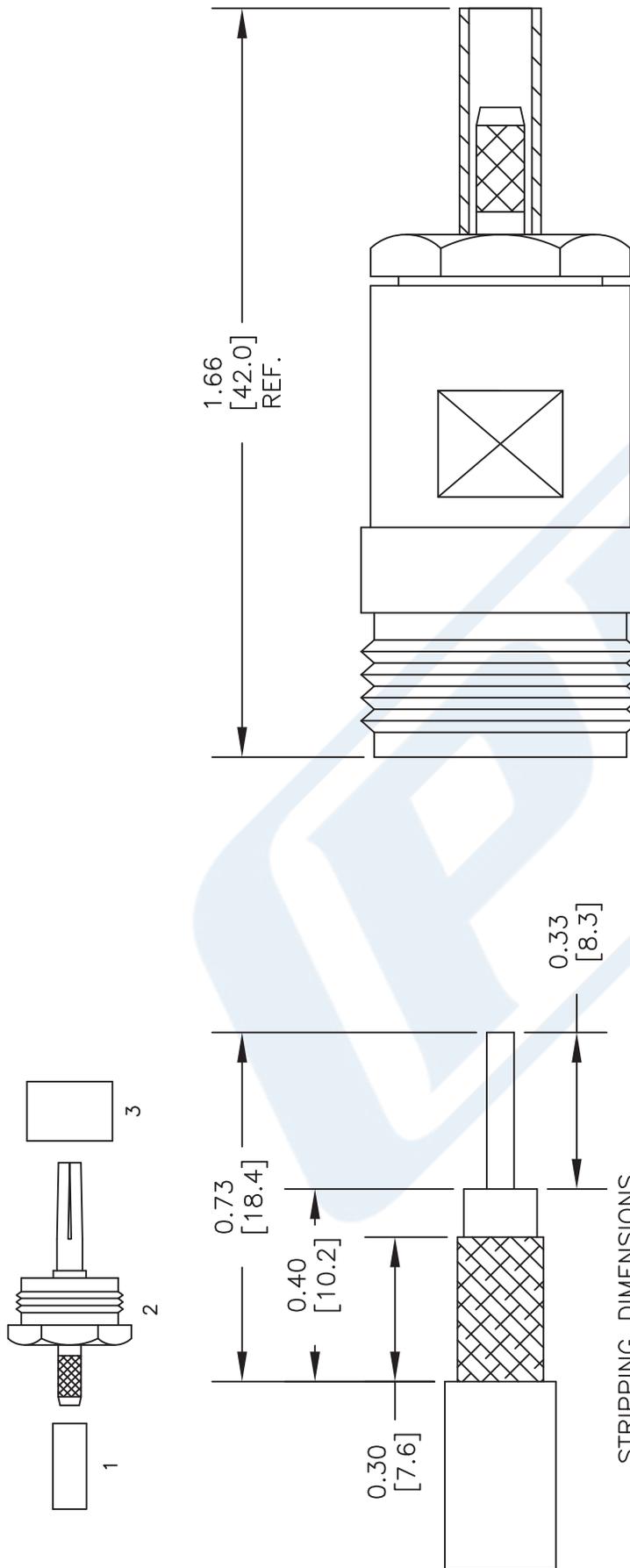
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS PE45172](http://www.pasternack.com/n-female-rg188-ds-rg316-ds-connector-pe45172-p.aspx)

URL: <http://www.pasternack.com/n-female-rg188-ds-rg316-ds-connector-pe45172-p.aspx>

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PE45172 CAD Drawing

N Female Connector Crimp/Solder Attachment for RG188-DS, RG316-DS



STRIPPING DIMENSIONS

ASSEMBLY PROCEDURES

1. STRIP CABLE AS SHOWN & SLIDE FERRULE (1) ONTO CABLE. TIN CENTER CONDUCTOR.
2. ADD EXTENSION (2) BY SLIDING EXTENSION BETWEEN BRAID & DIELECTRIC. SLIDE FERRULE (1) OVER BRAID & CRIMP.
3. SOLDER CENTER CONDUCTOR THROUGH HOLE IN CONTACT. SLIDE PTFE (3) OVER CONTACT. SLIDE ASSEMBLY INTO BODY & TIGHTEN.

CRIMP SIZE REQUIRED

CONTACT: SOLDER
 FERRULE: .128" HEX CRIMP TOOL



Pasternack Enterprises, Inc.
 P.O. Box 16759 | Irvine | CA | 92623
Phone: (949) 261-1920 | **Fax:** (949) 261-7451
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DWG TITLE

PE45172

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

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



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, Standard, Connector 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
Impedance		50		Ohms

Mechanical Specifications

Size

Length

0.7 in [17.78 mm]

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



PE45492

Width	0.156 in [3.96 mm]
Height	0 in [0 mm]
Weight	0.007 lbs [3.18 g]
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:

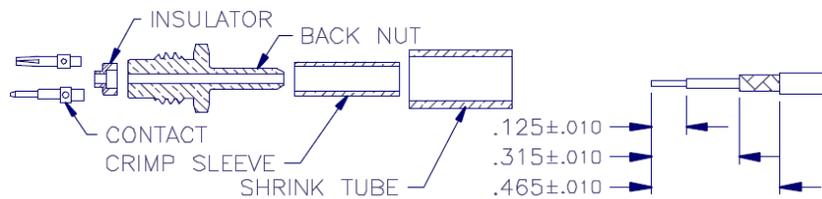
SSMC Plug Connector Crimp/Solder Attachment for RG188-DS, RG316-DS



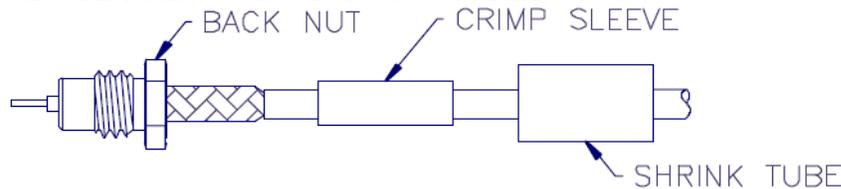
PE45492

Assembly Instruction

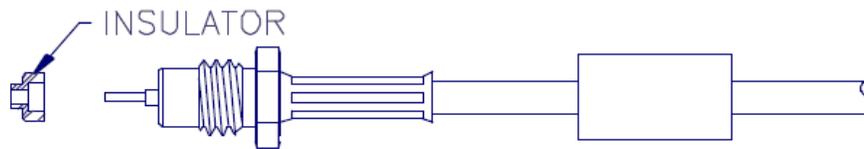
Assembly Instructions



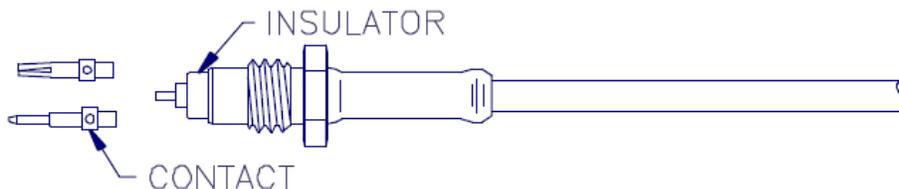
1. TRIM CABLE AS SHOWN ABOVE. TIN END OF CENTER CONDUCTOR.
2. SLIDE CRIMP SLEEVE AND SHRINK TUBE (IF SUPPLIED) OVER CABLE JACKET.
3. FLARE CABLE BRAID OUT SLIGHTLY BY ROTATING DIELECTRIC.



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.

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



PE45492

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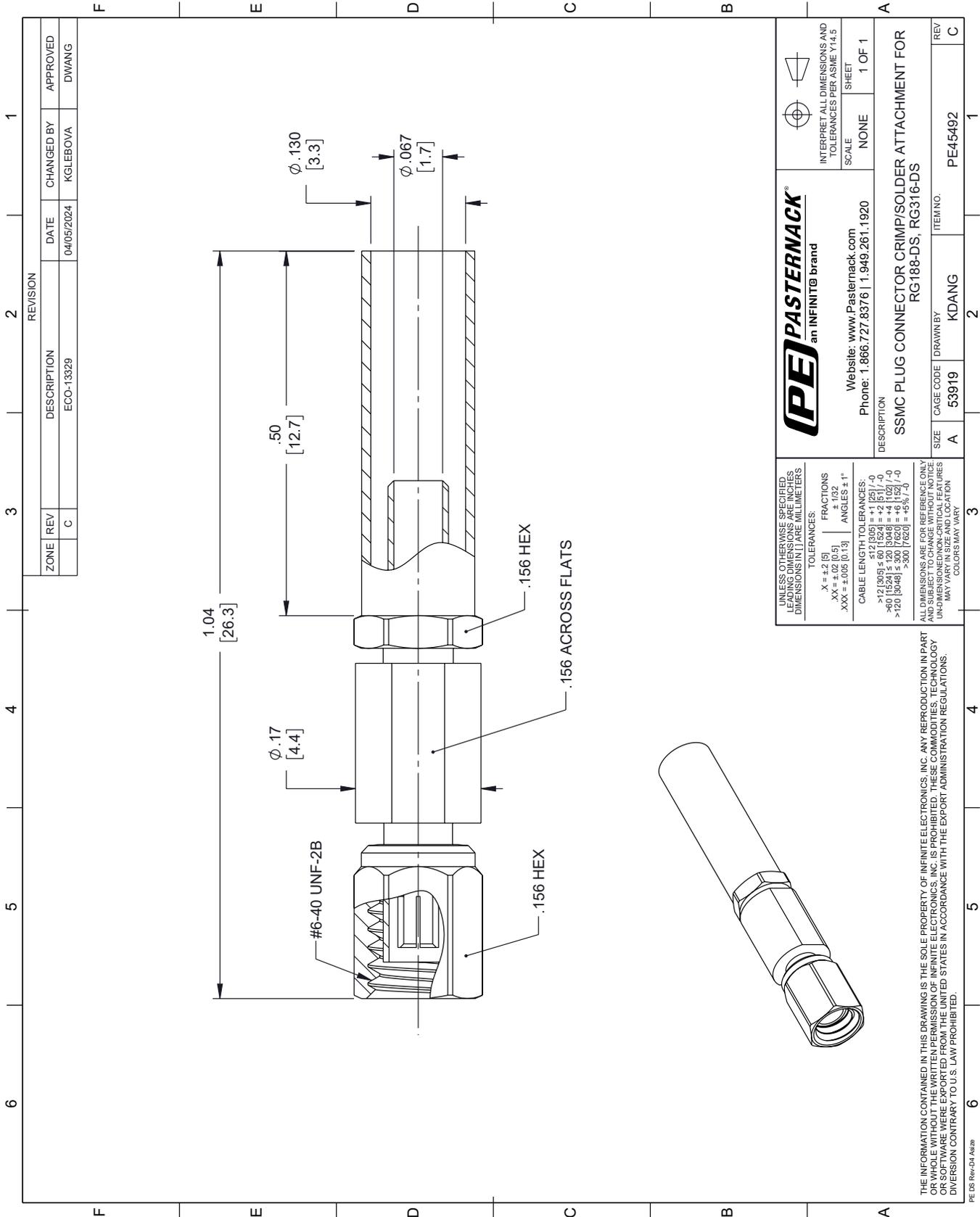
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PE45492 CAD Drawing

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



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	ECO-13329	KGLEBOVA	DWANG
	C				

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE
SHEET: 1 OF 1

DESCRIPTION: SSMC PLUG CONNECTOR CRIMP/SOLDER ATTACHMENT FOR RG188-DS, RG316-DS

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE45492

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0
 >300 [7620] = ±.6 [15.2] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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PE DS Rev-04 Add2

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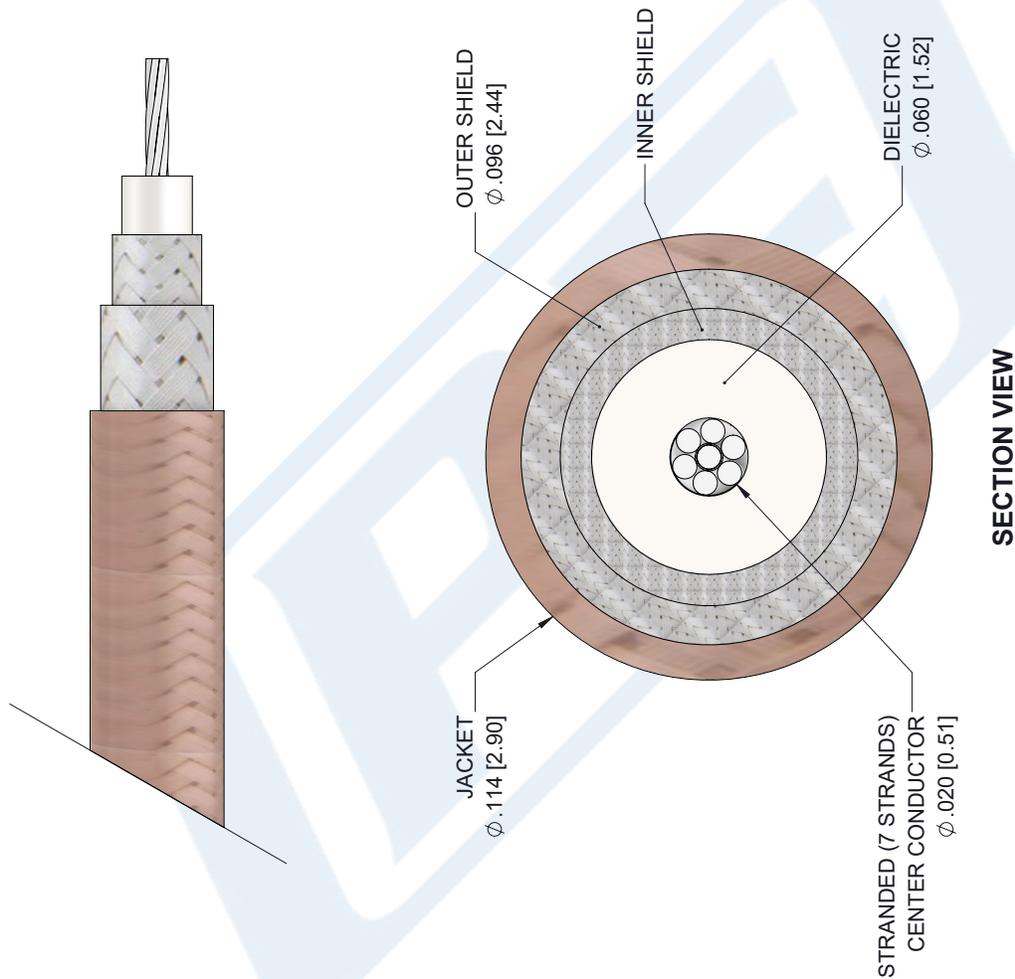
URL: <https://www.pasternack.com/flexible-0.114-rg316-ds-50-ohm-coax-cable-fep-jacket-rg316-ds-p.aspx>

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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



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FRACTIONS ±.132 ANGLES ± 1°		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	
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