



## SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax

### RF Cable Assemblies Technical Data Sheet

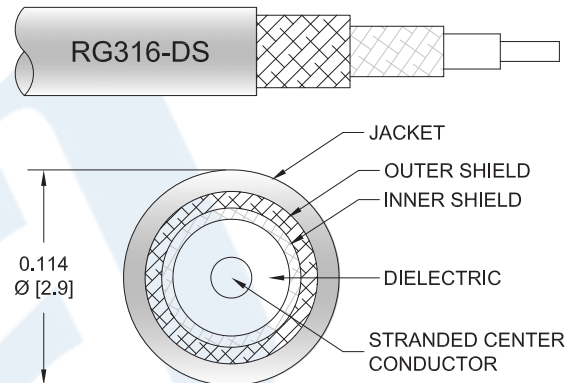
**PE3C6415**

#### Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: RG316-DS

#### Features

- Max Frequency 3 GHz
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C6415 SMA male to SMA male right angle cable using RG316-DS coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG316-DS coax. The PE3C6415 SMA male to SMA male cable assembly operates to 3 GHz. The right angle SMA interface on the RG316-DS cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax PE3C6415](#)



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**PE3C6415**

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.11	0.16	0.238	0.38	0.579	dB/ft
	0.36	0.52	0.78	1.25	1.9	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.05 \times \sqrt{\text{fGHz}}$  dB for the right angle connector and 0.1 dB for the straight connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.066 lbs [29.94 g]

##### Cable

Cable Type RG316-DS  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Braid  
 Shield Layer 2 Silver Plated Copper Braid  
 Jacket Material FEP, Tan  
 Jacket Diameter 0.114 in [2.9 mm]  
 Repeated Minimum Bend Radius 0.6 in [15.24 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	5/16 inch
Torque	3 in-lbs [0.34 Nm]	3 in-lbs [0.34 Nm]

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

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SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax

**RF Cable Assemblies Technical Data Sheet**

**PE3C6415**

**How to Order**

Part Number Configuration:

**PE3C6415**

- **xx**

**uu**

Unit of Measure:  
cm = Centimeters  
<blank> = Inches  
Length  
Base Number

Example: PE3C6415-12 = 12 inches long cable  
PE3C6415-100cm = 100 cm long cable

SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax 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.

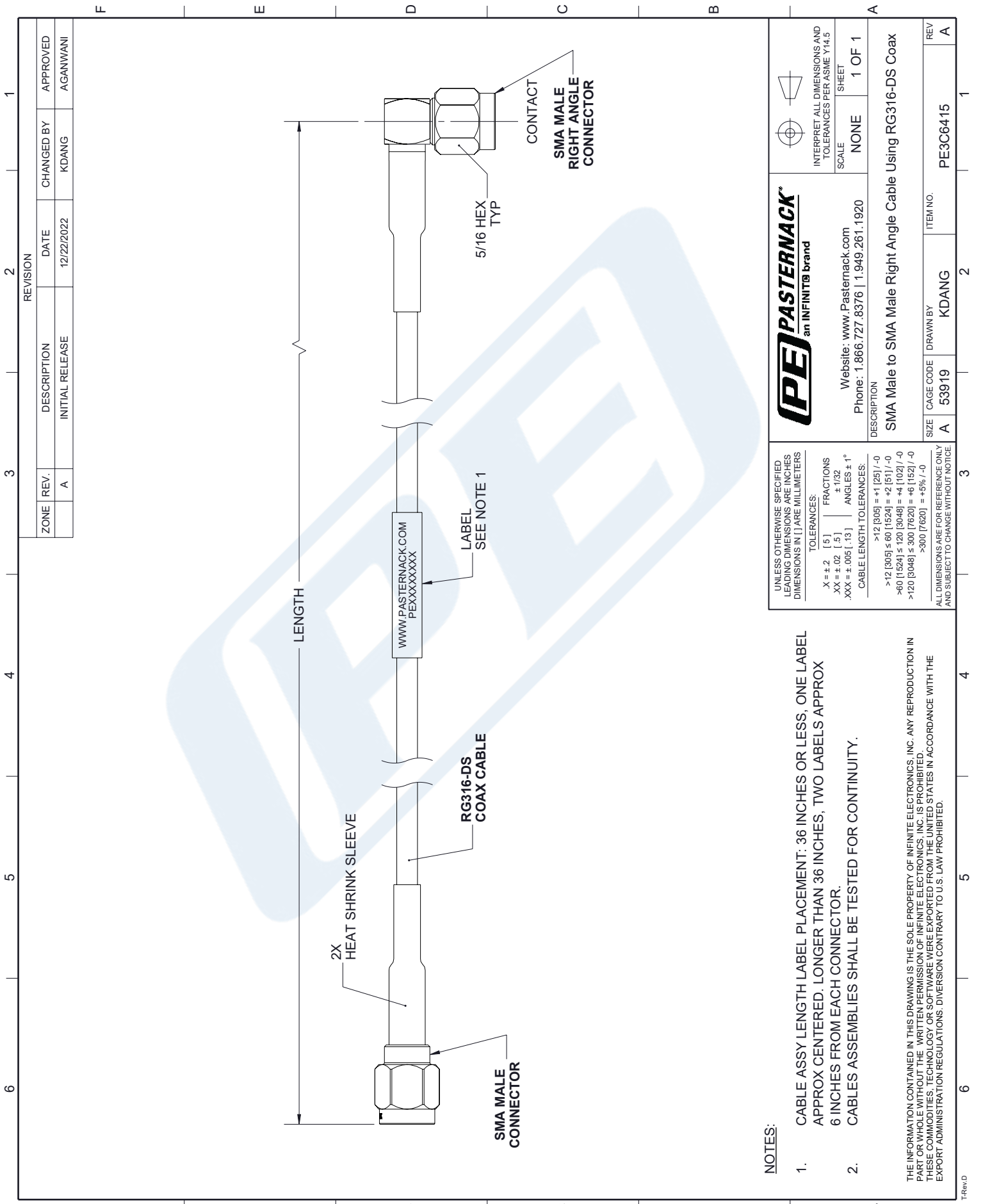
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URL: <https://www.pasternack.com/sma-male-to-sma-male-cable-using-rg316-ds-pe3c6415-p.aspx>

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.

# PE3C6415 CAD Drawing

## SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax



**NOTES:**

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X = ± .2 [ .5 ]	± 1/32
.XX = ± .02 [ .5 ]	ANGLES ± 1°
.XXX = ± .005 [ .13 ]	CABLE LENGTH TOLERANCES:
	>12 [305] = +1 [25] / -0
	>12 [305] ≤ 60 [1524] = +2 [51] / -0
	>60 [1524] ≤ 120 [3048] = +4 [102] / -0
	>120 [3048] ≤ 300 [7620] = +6 [152] / -0
	>300 [7620] = +5% / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE	

<b>PE PASTERNAK</b> an INFINITB brand	
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	SHEET 1 OF 1
SCALE NONE	
DESCRIPTION SMA Male to SMA Male Right Angle Cable Using RG316-DS Coax	
SIZE A	CAGE CODE 53919
DRAWN BY KDANG	ITEM NO. PE3C6415