

## SMA Male Right Angle to SMB Plug Right Angle Cable Using RG316-DS Coax with HeatShrink



### RF Cable Assemblies Technical Data Sheet

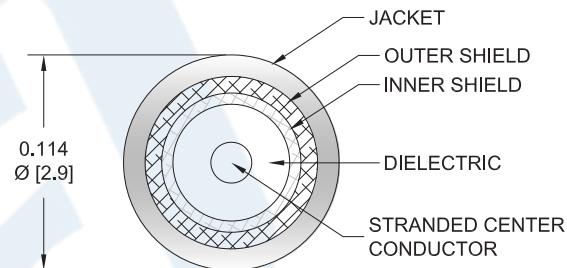
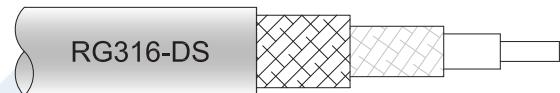
**PE3C0872/HS**

#### Configuration

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

#### Features

- Max Frequency 3 GHz
- Shielding Effectivity > 85 dB
- 69.5% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C0872/HS SMA male right angle to SMB plug 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 SMB cable assembly has a male to plug gender configuration with 50 ohm flexible RG316-DS coax. The PE3C0872/HS SMA male to SMB plug cable assembly operates to 3 GHz. The right angle SMA and right angle SMB interfaces on the RG316-DS cable allow for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 85 dB.

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 Right Angle to SMB Plug Right Angle Cable Using RG316-DS Coax with Heat-Shrink PE3C0872/HS](#)

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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	85			dB
Capacitance		28.96 [95.01]		pF/ft [pF/m]
DC Resistance Inner Conductor		83.82 [275]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		5.33 [17.49]		Ω/1000ft [Ω/Km]
Operating Voltage (AC)			250	Vrms

#### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.082	0.128	0.194	0.289	0.535	dB/ft
	0.27	0.42	0.64	0.95	1.76	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2dB per connector.

#### Mechanical Specifications

##### Cable Assembly

Weight 0.046 lbs [20.87 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]

One Time Minimum Bend Radius 0.59 in [14.99 mm]  
 Repeated Minimum Bend Radius 1.57 in [39.88 mm]

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#### Connectors

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

#### Environmental Specifications

##### Temperature

Operating Range

-55 to +165 deg C

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

#### Plotted and Other Data

Notes:

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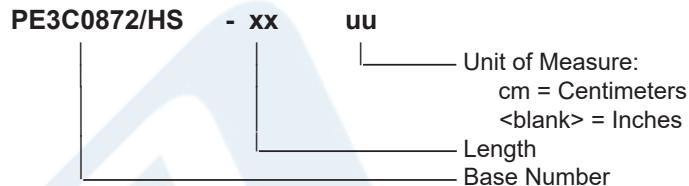
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**PE3C0872/HS**

#### How to Order

Part Number Configuration:



Example: PE3C0872/HS-12 = 12 inches long cable  
PE3C0872/HS-100cm = 100 cm long cable

SMA Male Right Angle to SMB Plug Right Angle Cable Using RG316-DS Coax with HeatShrink 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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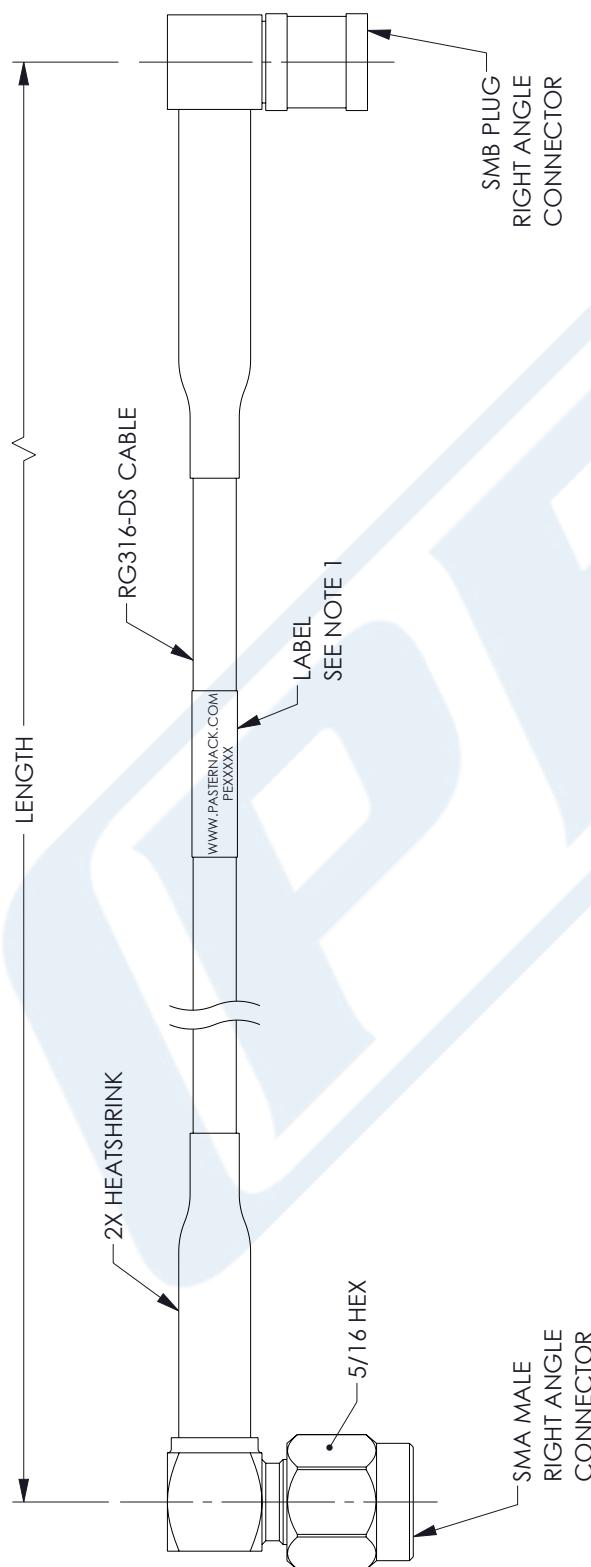
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE3C0872/HS CAD Drawing

## SMA Male Right Angle to SMB Plug Right Angle Cable Using RG316-DS Coax with HeatShrink

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	12/08/2022		SRAUTUS



## NOTES.

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

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<b>OTHERWISE SPECIFIED DIMENSIONS ARE INCHES UNLESS OTHERWISE SPECIFIED IN MILLIMETERS</b> <b>TOLERANCES:</b> <table border="1" style="margin-left: 20px;"> <tr> <td>[6]</td> <td>FRACTIONS</td> </tr> <tr> <td>2</td> <td><math>\pm 1/32</math></td> </tr> <tr> <td>0.5</td> <td><math>\pm 1/16</math></td> </tr> <tr> <td>0.13</td> <td><math>\pm 1/32</math></td> </tr> </table> <b>ANGLES <math>\pm 1^\circ</math></b> <b>LENGTH TOLERANCES:</b> <table border="1" style="margin-left: 20px;"> <tr> <td><math>&gt;12</math> [305]</td> <td><math>= +1</math> [25]</td> <td><math>-0</math></td> </tr> <tr> <td>5</td> <td><math>= +2</math> [152]</td> <td><math>-0</math></td> </tr> <tr> <td>4</td> <td><math>= +1</math> [102]</td> <td><math>-0</math></td> </tr> <tr> <td>3</td> <td><math>= +4</math> [102]</td> <td><math>-0</math></td> </tr> </table>		[6]	FRACTIONS	2	$\pm 1/32$	0.5	$\pm 1/16$	0.13	$\pm 1/32$	$>12$ [305]	$= +1$ [25]	$-0$	5	$= +2$ [152]	$-0$	4	$= +1$ [102]	$-0$	3	$= +4$ [102]	$-0$	<b>ITEM NO.</b> <b>PE3C0872/HS</b>		
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<b>NOTES:</b> 1. DIMENSIONS ARE FOR REFERENCE ONLY 2. IT IS THE RESPONSIBILITY OF THE BUYER TO CHECK THE DRAWINGS FOR THE LATEST DESIGN INFORMATION.																								