



## SMA Male Right Angle to MCX Jack Cable Using RG316 Coax

### RF Cable Assemblies Technical Data Sheet

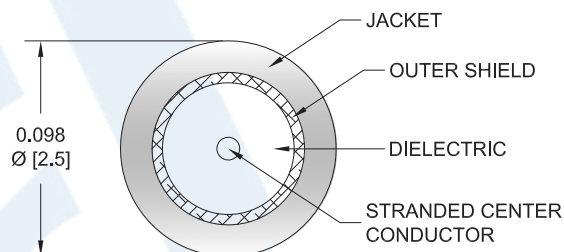
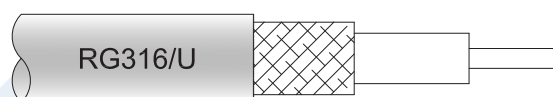
PE3W02744

#### Configuration

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

#### Features

- Max Frequency 3 GHz
- 69% Phase Velocity
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W02744 SMA male right angle to MCX jack cable using RG316 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 MCX cable assembly has a male to jack gender configuration with 50 ohm flexible RG316 coax. The PE3W02744 SMA male to MCX jack cable assembly operates to 3 GHz. The right angle SMA interface on the RG316 cable allows for easier connections in tight spaces.

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.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.5:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.41 [27.59]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
Jacket Spark			2,000	Vrms

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 MCX Jack Cable Using RG316 Coax PE3W02744](#)



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**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.05	0.1	0.4	1	3	GHz
Insertion Loss (Max.)	0.075	0.11	0.21	0.38	0.58	dB/ft
	0.25	0.36	0.69	1.25	1.9	dB/m

**Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1dB per connector.

**Mechanical Specifications**

**Cable Assembly**

Diameter 0.315 in [8 mm]

**Cable**

Cable Type RG316  
 Impedance 50 Ohms  
 Inner Conductor Type Stranded  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 1  
 Shield Layer 1 Silver Plated Copper Braid  
 Jacket Material FEP, Tan  
 Jacket Diameter 0.102 in [2.59 mm]

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#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	MCX Jack
Specification	MIL-STD-348A	MIL-C-39012
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Gold
Contact Plating Specification	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	QQ-N-290
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

#### Mechanical Specification Notes:

\*All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.

#### 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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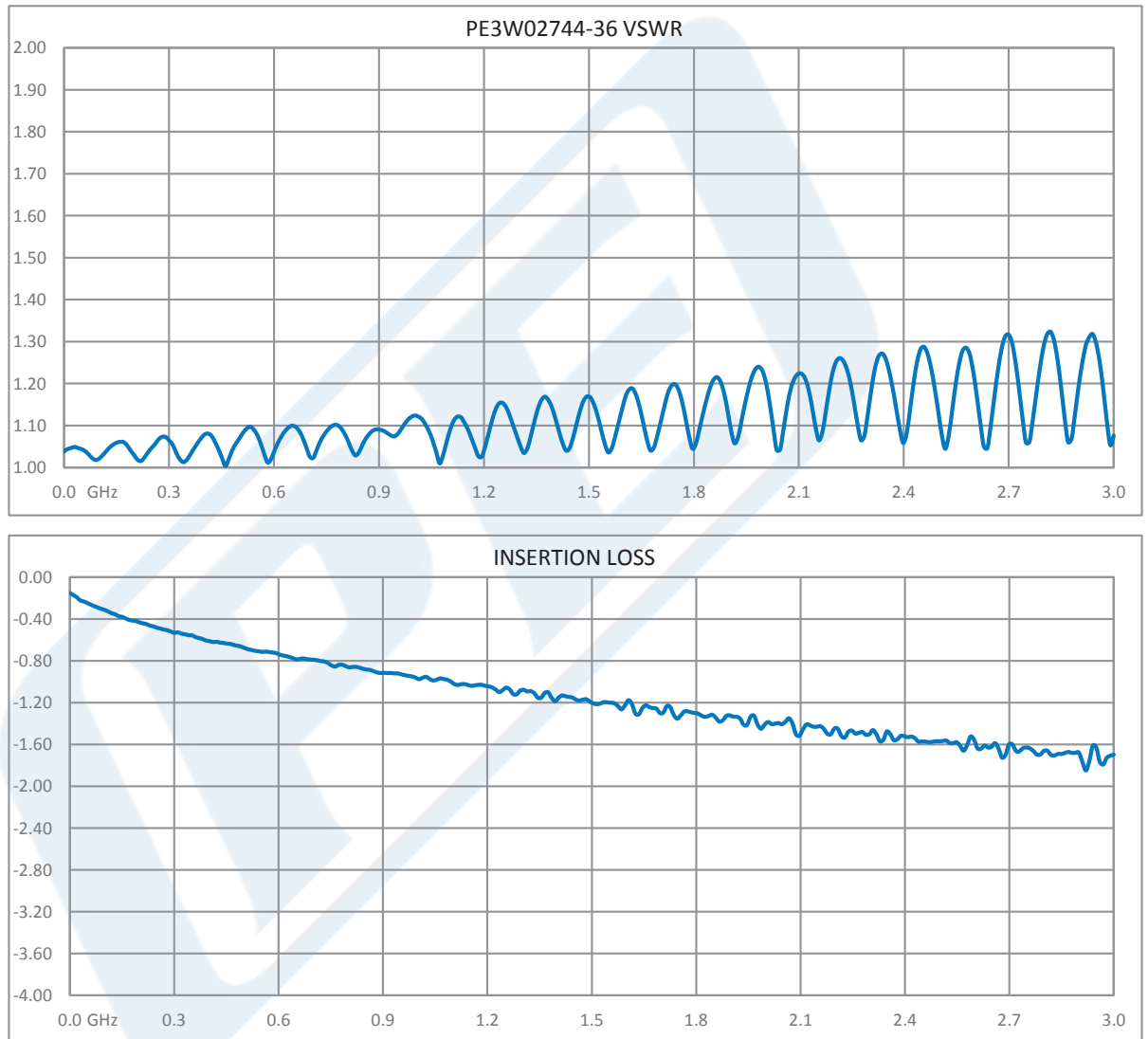


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#### Typical Performance Data



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PE3W02744

#### How to Order

Part Number Configuration:

**PE3W02744**

- **xx**

**uu**

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

Example: PE3W02744-12 = 12 inches long cable  
PE3W02744-100cm = 100 cm long cable

SMA Male Right Angle to MCX Jack Cable Using RG316 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.

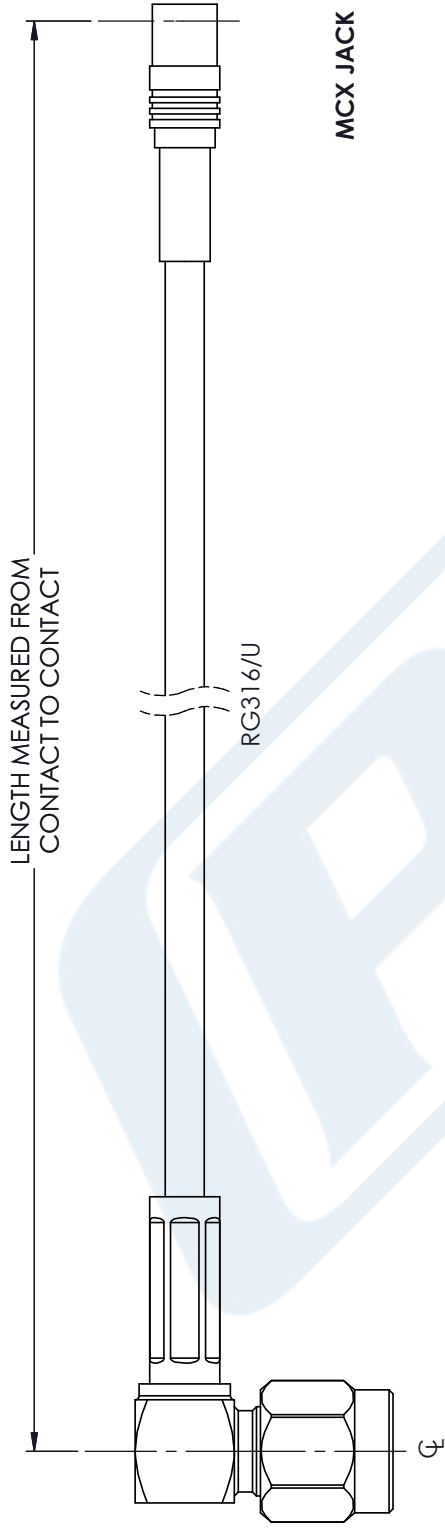
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URL: <https://www.pasternack.com/sma-male-mcx-jack-rg316u-cable-assembly-pe3w02744-p.aspx>

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.

# PE3W02744 CAD Drawing

## SMA Male Right Angle to MCX Jack Cable Using RG316 Coax



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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DWG TITLE  
 PE3W02744

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].

CAGE CODE 53919

CAD FILE 05/02/18

SCALE N/A

SIZE A  
 CN2379