



## MMCX Plug Right Angle to SMA Male Right Angle Cable Using RG316 Coax

### RF Cable Assemblies Technical Data Sheet

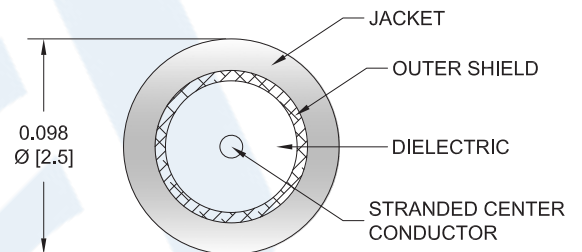
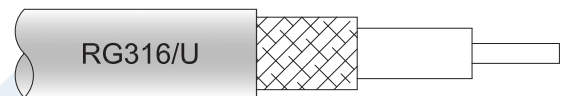
PE3W07894

#### Configuration

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

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W07894 MMCX plug right angle to SMA male right angle 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 MMCX to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible RG316 coax. The PE3W07894 MMCX plug to SMA male cable assembly operates to 3 GHz. The right angle MMCX and right angle SMA interfaces on the RG316 cable allow 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug Right Angle to SMA Male Right Angle Cable Using RG316 Coax PE3W07894](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
Capacitance		29.4 [96.46]		pF/ft [pF/m]
Operating Voltage (AC)			250	Vrms
Jacket Spark			2,000	Vrms

**Specifications by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Max.)	0.111	0.16	0.239	0.38	0.58	dB/ft
	0.36	0.52	0.78	1.25	1.9	

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per MMCX plug right angle connector and 0.2 dB per SMA male right angle connector.

**Mechanical Specifications**

**Cable Assembly**

Diameter 0.312 in [7.92 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	MMCX Plug Right Angle	SMA Male Right Angle
Specification	BS EN 122340	MIL-C-39012
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold over Nickel
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Gold	Brass, Gold
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification	3 µin minimum	100 µin minimum
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]

**Environmental Specifications**

**Temperature**

Operating Range -55 to +155 deg C

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

**Plotted and Other Data**

Notes:

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**How to Order**

Part Number Configuration:

**PE3W07894**

- **xx**

**uu**

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

Example: PE3W07894-12 = 12 inches long cable  
PE3W07894-100cm = 100 cm long cable

MMCX Plug Right Angle to SMA Male Right Angle 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [MMCX Plug Right Angle to SMA Male Right Angle Cable Using RG316 Coax PE3W07894](https://www.pasternack.com/mmcx-plug-sma-male-rg316u-cable-assembly-pe3w07894-p.aspx)

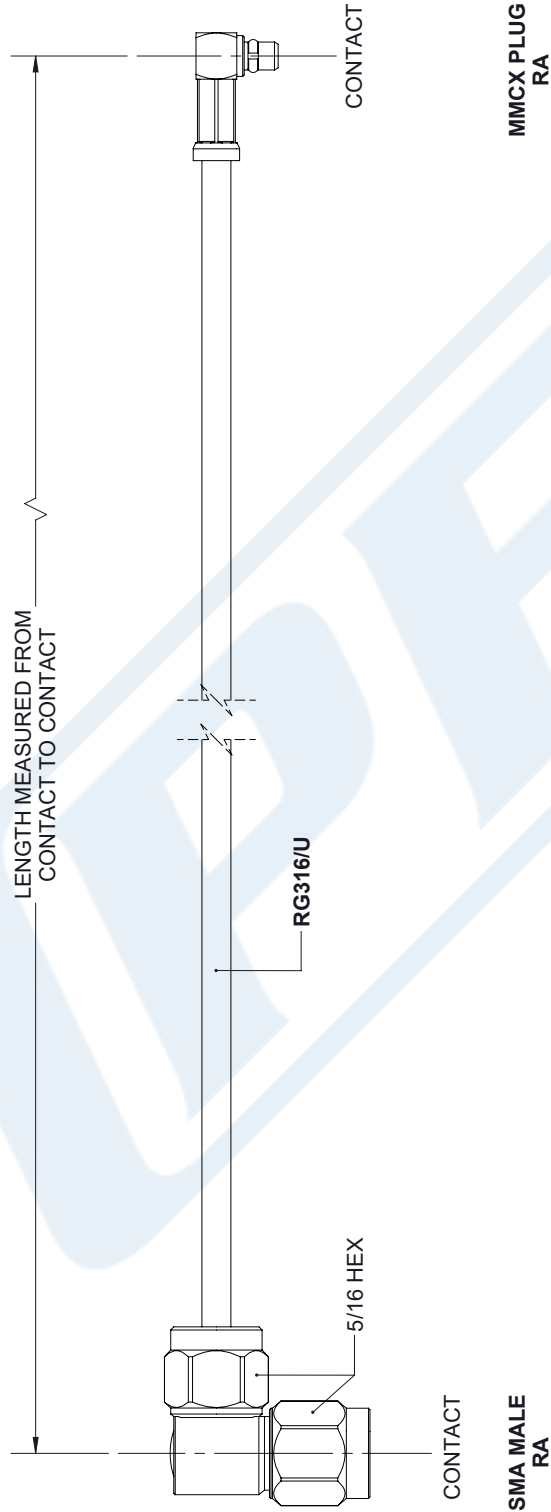
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. 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.

# PE3W07894 CAD Drawing

MMCX Plug Right Angle to SMA Male Right Angle Cable Using RG316 Coax

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/22/2020	S. ELLIS



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p><b>TOLERANCES:</b></p> <table border="0"> <tr> <td>.X = ± .2</td> <td>[.08]</td> <td>FRACTIONS</td> <td></td> </tr> <tr> <td>.XX = ± .02</td> <td>[.51]</td> <td></td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ± .005</td> <td>[.13]</td> <td>ANGLES ± 1°</td> <td></td> </tr> </table> <p><b>CABLE LENGTH (L) TOLERANCES:</b></p> <table border="0"> <tr> <td>L ≤ 12</td> <td>[305]</td> <td>= +1 [25] / -0</td> </tr> <tr> <td>12 [305] &lt; L ≤ 60</td> <td>[1524]</td> <td>= +2 [51] / -0</td> </tr> <tr> <td>60 [1524] &lt; L ≤ 120</td> <td>[3048]</td> <td>= +4 [102] / -0</td> </tr> <tr> <td>120 [3048] &lt; L ≤ 300</td> <td>[7620]</td> <td>= +6 [152] / -0</td> </tr> <tr> <td>300 [7620] &lt; L ≤ ∞</td> <td></td> <td>= +5% / L / -0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.X = ± .2	[.08]	FRACTIONS		.XX = ± .02	[.51]		± 1/32	.XXX = ± .005	[.13]	ANGLES ± 1°		L ≤ 12	[305]	= +1 [25] / -0	12 [305] < L ≤ 60	[1524]	= +2 [51] / -0	60 [1524] < L ≤ 120	[3048]	= +4 [102] / -0	120 [3048] < L ≤ 300	[7620]	= +6 [152] / -0	300 [7620] < L ≤ ∞		= +5% / L / -0	<p><b>THIRD-ANGLE PROJECTION</b></p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF PASTERNAK CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>
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<p><b>PE PASTERNAK</b> an INFINITI brand</p> <p>Pasternack Enterprises, Inc. P. O. Box 16759, Irvine, CA 92623. Phone: 1.949.261.1920   1.866.727.8376 Fax: 1.949.261.7451 Website: www.pasternack.com E-mail: sales@pasternack.com</p>	<p>ITEM NO. PE3W07894</p> <p>SIZE A</p> <p>CAGE CODE 53919</p> <p>DRAWN BY K.DANG</p> <p>REV A</p>																											

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