



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

### RF Cable Assemblies Technical Data Sheet

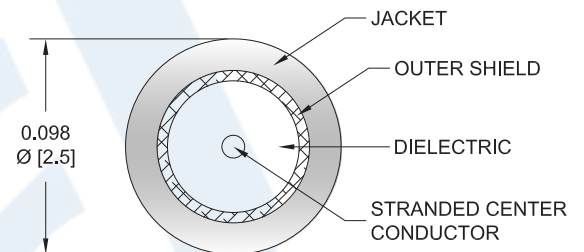
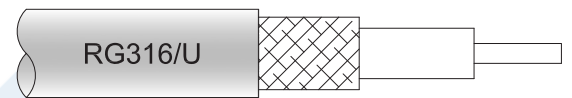
PE3W10654

#### Configuration

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

#### Features

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



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W10654 SMA male right angle to MCX plug 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 SMA to MCX cable assembly has a male to plug gender configuration with 50 ohm flexible RG316 coax. The PE3W10654 SMA male to MCX plug cable assembly operates to 3 GHz. The right angle SMA and right angle MCX 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: [SMA Male Right Angle to MCX Plug Right Angle Cable Using RG316 Coax PE3W10654](#)



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**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.5:1	
Velocity of Propagation		69		%
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			2,000	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 (Typ.)	0.11	0.16	0.23	0.38	0.58	dB/ft
	0.36	0.52	0.75	1.25	1.9	

**Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. The Insertion Loss includes an estimated insertion loss of 0.15dB per connector loss.

**Mechanical Specifications**

**Cable Assembly**

Diameter 0.689 in [17.5 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 Plug Right Angle
Specification		CECC 22220
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	Teflon	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Gold	
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

**Environmental Specifications**

**Temperature**

Operating Range -40 to +60 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:

**PE3W10654**

- **xx**

**uu**

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

Example: PE3W10654-12 = 12 inches long cable  
PE3W10654-100cm = 100 cm long cable

SMA Male Right Angle to MCX Plug 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: [SMA Male Right Angle to MCX Plug Right Angle Cable Using RG316 Coax PE3W10654](https://www.pasternack.com/sma-male-mcx-plug-rg316u-cable-assembly-pe3w10654-p.aspx)

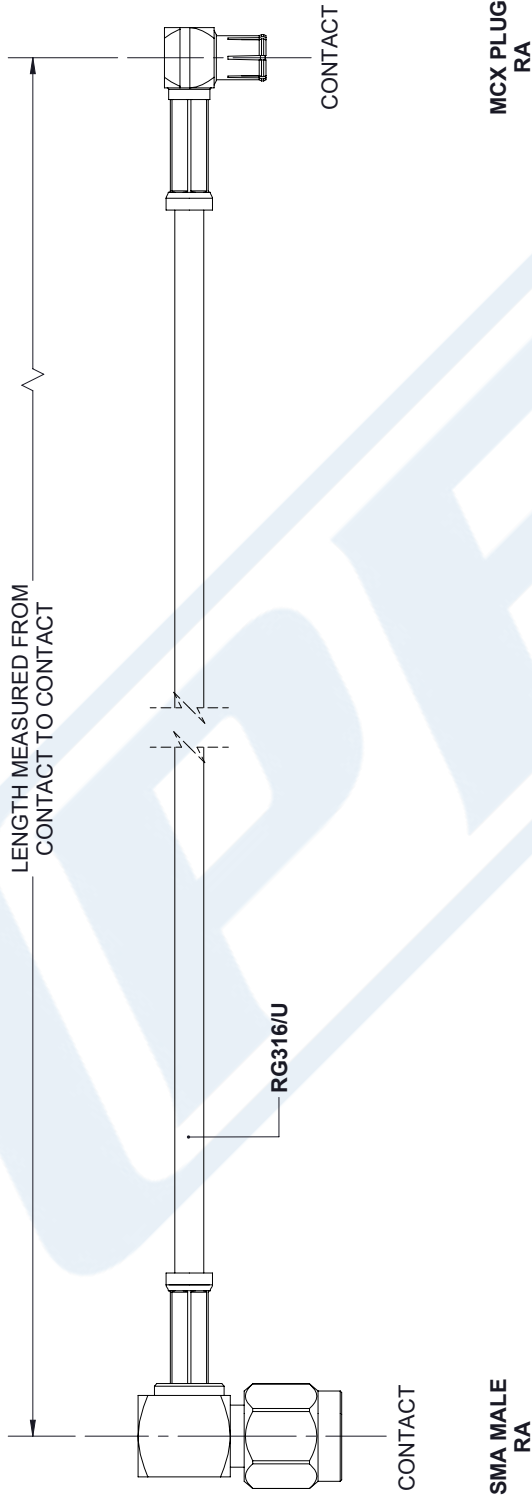
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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements.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

# PE3W10654 CAD Drawing

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

REVISIONS		
REV.	DESCRIPTION	DATE
A	INITIAL RELEASE	4/15/2021
		APPROVED
		S. ELLIS



<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table border="0"> <tr> <td>.X = ±.2</td> <td>[.08]</td> <td>FRACTIONS</td> </tr> <tr> <td>.XX = ±.02</td> <td>[.51]</td> <td>± 1/32</td> </tr> <tr> <td>.XXX = ±.005</td> <td>[.13]</td> <td>ANGLES ± 1°</td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</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>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>THIRD-ANGLE PROJECTION</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>ITEM NO.</p> <p>PE3W10654</p>		<p>REV</p> <p>A</p>																								

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