

SMA Male to MCX Plug Cable Using RG316 Coax

RF Cable Assemblies Technical Data Sheet

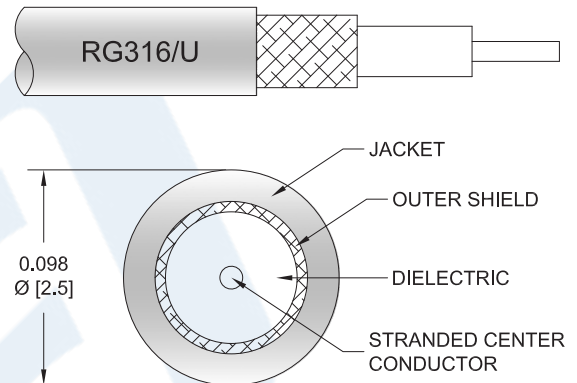
PE3W02270

Configuration

- Connector 1: SMA Male
- Connector 2: MCX Plug
- Cable Type: RG316
- Coax Flex Type: Flexible

Features

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



Applications

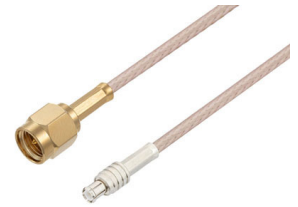
- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02270 SMA male to MCX plug 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 PE3W02270 SMA male to MCX plug cable assembly operates to 3 GHz.

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 MCX Plug Cable Using RG316 Coax PE3W02270](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		69		%
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	0.238	0.38	0.58	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 0.1 dB per connector.

Mechanical Specifications

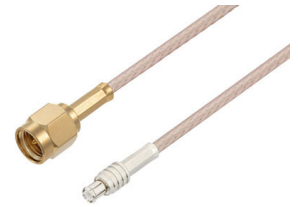
Cable Assembly

Weight 0.03 lbs [13.61 g]

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 0.098 in [2.49 mm]

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Connectors

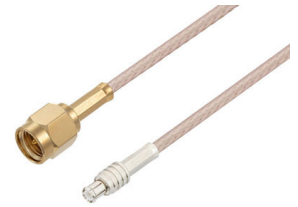
Description	Connector 1	Connector 2
Type	SMA Male	MCX Plug
Specification		CECC 22220
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating	Brass, Gold	
Hex Size	5/16 in	
Torque	5 in-lbs [0.57 Nm]	

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

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet

PE3W02270

How to Order

Part Number Configuration:

PE3W02270

- **xx**

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

Example: PE3W02270-12 = 12 inches long cable
PE3W02270-100cm = 100 cm long cable

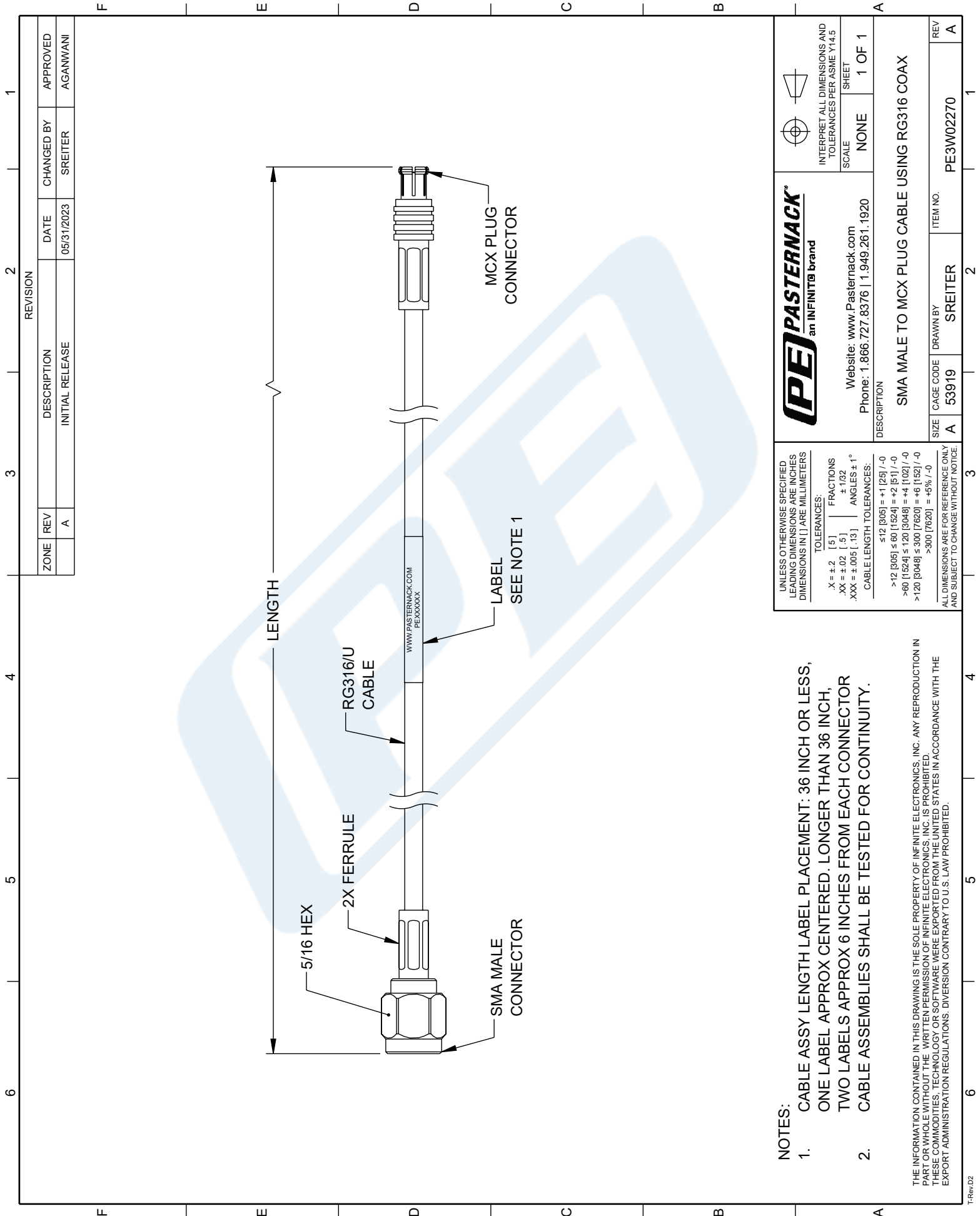
SMA Male to MCX Plug Cable Using RG316 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to MCX Plug Cable Using RG316 Coax PE3W02270](#)

URL: <https://www.pasternack.com/sma-male-to-mcx-plug-cable-using-rg316-pe3w02270-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.

PE3W02270 CAD Drawing
SMA Male to MCX Plug Cable Using RG316 Coax



NOTES:

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

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 PASTERNAK an INFINITE brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
		SCALE: NONE
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: SMA MALE TO MCX PLUG CABLE USING RG316 COAX		
SIZE: A	CAGE CODE: 53919	ITEM NO.: PE3W02270
DRAWN BY: SREITER		REV: A

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:
X = ±.2 [.5] FRACTIONS
.XX = ±.02 [.5] ±.132
.XXX = ±.005 [.13] ANGLES ± 1°

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.