



SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

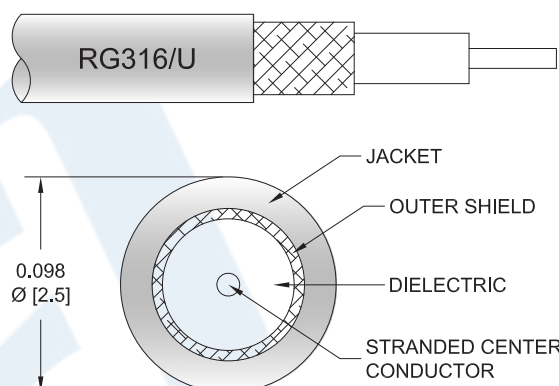
PE3W12639/HS

Configuration

- Connector 1: SMC Plug
- Connector 2: MMCX Plug
- Cable Type: RG316

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W12639/HS SMC plug to MMCX 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 SMC to MMCX cable assembly has a plug to plug gender configuration with 50 ohm flexible RG316 coax. The PE3W12639/HS SMC plug to MMCX 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: [SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink PE3W12639/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 | | % |
| 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 (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 for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.028 lbs [12.7 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 | 0.102 in [2.59 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|---------------------------------------|------------------------|----------------|
| Type | SMC Plug | MMCX Plug |
| Specification | MIL-STD-348A | BS EN 122340 |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Beryllium Copper, Gold | Brass, Gold |
| Contact Plating Specification | 30 µin minimum | 30 µin minimum |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | | Brass, Gold |
| Outer Conductor Plating Specification | | 3 µin minimum |
| Body Material and Plating | Brass, Nickel | Brass, Gold |
| Body Plating Specification | 100 µin minimum | 3 µin minimum |
| Coupling Nut Material and Plating | Brass, Nickel | |
| Coupling Nut Plating Specification | 100 µin minimum | |
| Hex Size | 1/4 inch | |

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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PE3W12639/HS

How to Order

Part Number Configuration:

PE3W12639/HS

- **xx**

uu

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

Example: PE3W12639/HS-12 = 12 inches long cable
PE3W12639/HS-100cm = 100 cm long cable

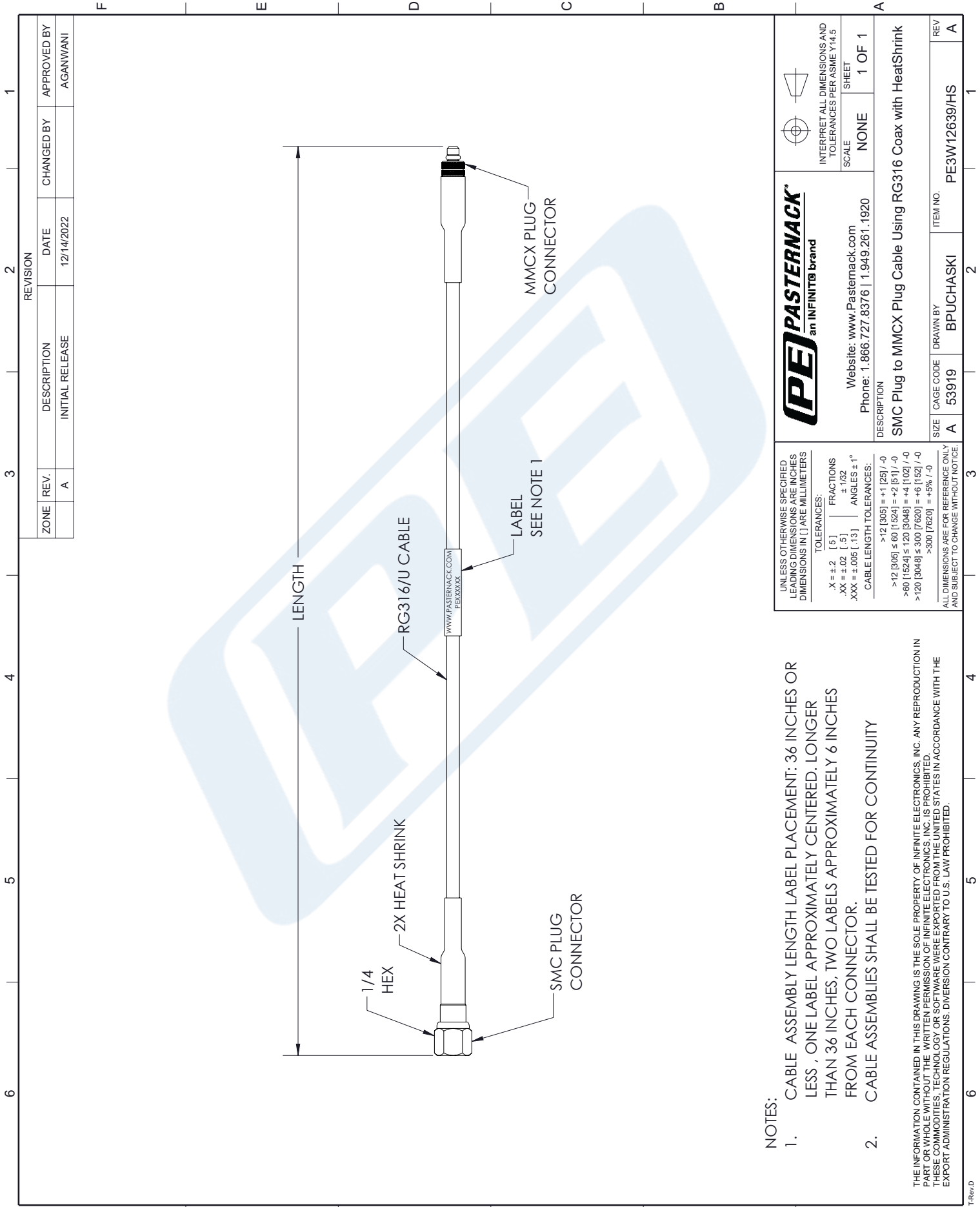
SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink PE3W12639/HS](https://www.pasternack.com/smc-plug-to-mmcx-plug-cable-using-rg316-with-heatshrink-pe3w12639-hs-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.

PE3W12639/HS CAD Drawing
SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink



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.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY

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| | |
|--------------------------------------------------------------------------------------------------|------------------|
| UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS | |
| TOLERANCES: | |
| X = ±.2 [.5] | FRACTIONS ± 1/32 |
| .XX = ±.02 [.5] | ANGLES ± 1° |
| XXX = ±.005 [.13] | |
| 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. | |

| | |
|---------------------------------------------------------------------------------------------------------------|-----------------------|
| PE PASTERNAK an INFINITO brand | |
| Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920 | |
| INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 | SCALE: NONE |
| SHEET 1 OF 1 | |
| DESCRIPTION SMC Plug to MMCX Plug Cable Using RG316 Coax with HeatShrink | |
| SIZE A | CAGE CODE 53919 |
| DRAWN BY BPUCHASKI | ITEM NO. PE3W12639/HS |
| REV A | |