



SMA Male to SMA Male Cable 24 Inch Length Using RG316 Coax with HeatShrink

RF Cable Assemblies Technical Data Sheet

PE3W02070/HS-24

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: RG316

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02070/HS-24 SMA male to SMA male 24 inch 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible RG316 coax. The PE3W02070/HS-24 SMA male to SMA male 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.

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] |
| DC Resistance Inner Conductor | | 8.41 [27.59] | | Ω /1000ft [Ω /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 to SMA Male Cable 24 Inch Length Using RG316 Coax with HeatShrink PE3W02070/HS-24](#)



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Specifications by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 0.1 | 0.25 | 0.5 | 1 | 3 | GHz |
| Insertion Loss (Max.) | 0.42 | 0.52 | 0.68 | 0.96 | 1.36 | dB |

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss Includes an estimated insertion loss of 0.2dB of connector loss.

Mechanical Specifications

Cable Assembly

Length* 24 in [609.6 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]

Connectors

| Description | Connector 1 | Connector 2 |
|-----------------------------------|--------------------|--------------------|
| Type | SMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Gold | Brass, Gold |
| Coupling Nut Material and Plating | Brass, Gold | Brass, Gold |
| Hex Size | 5/16 in | 5/16 in |
| Torque | 5 in-lbs [0.57 Nm] | 5 in-lbs [0.57 Nm] |

Mechanical Specification Notes:

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

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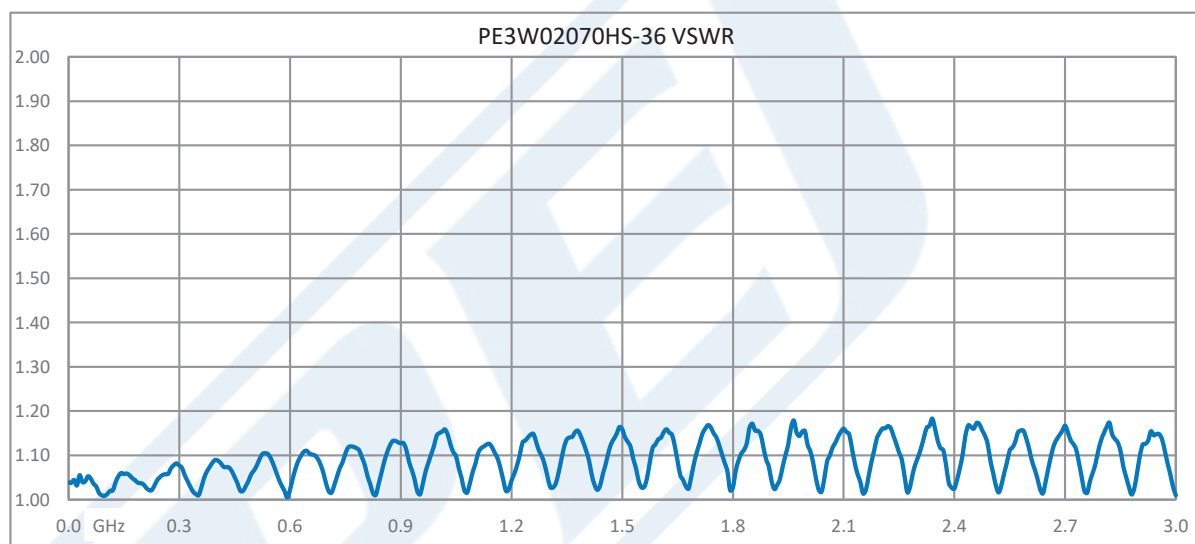
PE3W02070/HS-24

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

Plotted and Other Data

Notes:

Typical Performance Data



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PE3W02070/HS-24

How to Order

Part Number Configuration:

PE3W02070/HS

- xx

uu

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

Example: PE3W02070/HS-12 = 12 inches long cable
PE3W02070/HS-100cm = 100 cm long cable

SMA Male to SMA Male Cable 24 Inch Length 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.

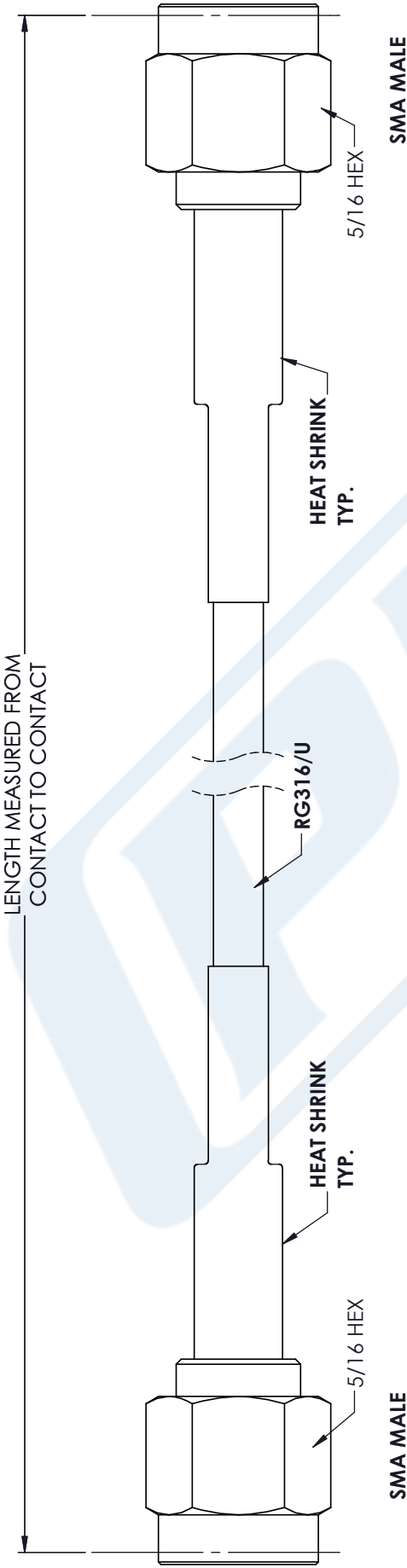
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URL: <https://www.pasternack.com/sma-male-sma-male-rg316u-cable-assembly-pe3w02070-hs-24-p.aspx>

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.

PE3W02070/HS-24 CAD Drawing

SMA Male to SMA Male Cable 24 Inch Length Using RG316 Coax with HeatShrink



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

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES



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THE ENGINEER'S RF SOURCE

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| | |
|-----------|--------------|
| DWG TITLE | PE3W02070/HS |
| CAGE CODE | 53919 |

| | | | | | | | |
|---|----------|----------|-------|-----|------|---|--------|
| 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]. | CAD FILE | 10/22/18 | SCALE | N/A | SIZE | A | CN2379 |
|---|----------|----------|-------|-----|------|---|--------|