

SMA Male to SMA Male Cable Using RG178 Coax



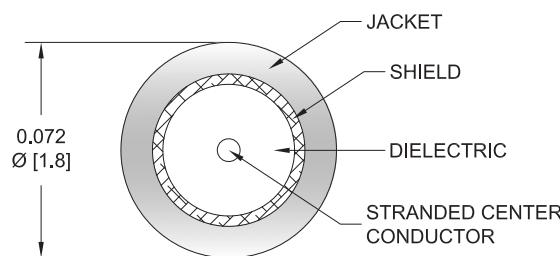
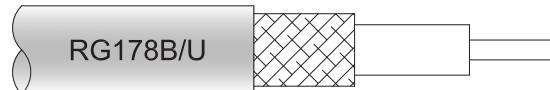
PE3W03012

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: RG178
- Coax Flex Type: Flexible

Features

- Max Frequency 1 GHz
- 70% Phase Velocity
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W03012 SMA male to SMA male cable using RG178 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 RG178 coax. The PE3W03012 SMA male to SMA male cable assembly operates to 1 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 | | 1,000 | MHz |
| VSWR | | 1.4:1 | | |
| Velocity of Propagation | | 70 | | % |
| Capacitance | | 29.4 [96.46] | | pF/ft [pF/m] |

Specifications by Frequency

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| Part Number | Length | Description | F1 | F2 | F3 | F4 | Units MHz | Weight (lbs) |
|--------------|--------------------------|-----------------------|------|------|-------|-------|--------------|--------------|
| | | Frequency | 100 | 250 | 500 | 1000 | | |
| PE3W03012 | Custom Lengths Available | Insertion Loss (Typ.) | 0.14 | 0.21 | 0.305 | 0.444 | dB/ft | |
| | | | 0.46 | 0.69 | 1.01 | 1.46 | dB/m | |
| PE3W03012-6 | 6 inch | Insertion Loss (Typ.) | 0.27 | 0.31 | 0.36 | 0.43 | dB | 0.029 |
| PE3W03012-9 | 9 inch | Insertion Loss (Typ.) | 0.31 | 0.36 | 0.43 | 0.54 | dB | 0.03 |
| PE3W03012-12 | 12 inch | Insertion Loss (Typ.) | 0.34 | 0.41 | 0.51 | 0.65 | dB | 0.031 |
| PE3W03012-24 | 24 inch | Insertion Loss (Typ.) | 0.48 | 0.62 | 0.81 | 1.09 | dB | 0.037 |
| PE3W03012-36 | 36 inch | Insertion Loss (Typ.) | 0.62 | 0.83 | 1.12 | 1.54 | dB | 0.042 |

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.031 pounds
 Additional Weight per Inch: 0.00042 pounds

Mechanical Specifications

Cable Assembly

Weight 0.031 lbs [14.06 g]

Cable

| | |
|--------------------------------------|----------------------------|
| Cable Type | RG178 |
| 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 | 0.072 in [1.83 mm] |
| Repeated Minimum Bend Radius | 0.4 in [10.16 mm] |

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|----------------------|----------------------|
| Type | SMA Male | SMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50 μ in minimum | 50 μ in minimum |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 μ in minimum | 100 μ in minimum |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Specification | 100 μ in minimum | 100 μ in minimum |

Environmental Specifications

Operating Range Temperature -55 to +165 deg C

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

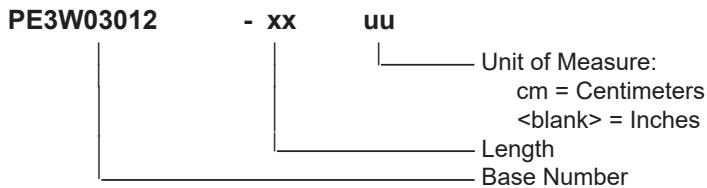
Plotted and Other Data

Notes:

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**PE3W03012****Typical Performance Data****How to Order**

Part Number Configuration:



Example: PE3W03012-12 = 12 inches long cable
PE3W03012-100cm = 100 cm long cable

SMA Male to SMA Male Cable Using RG178 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.

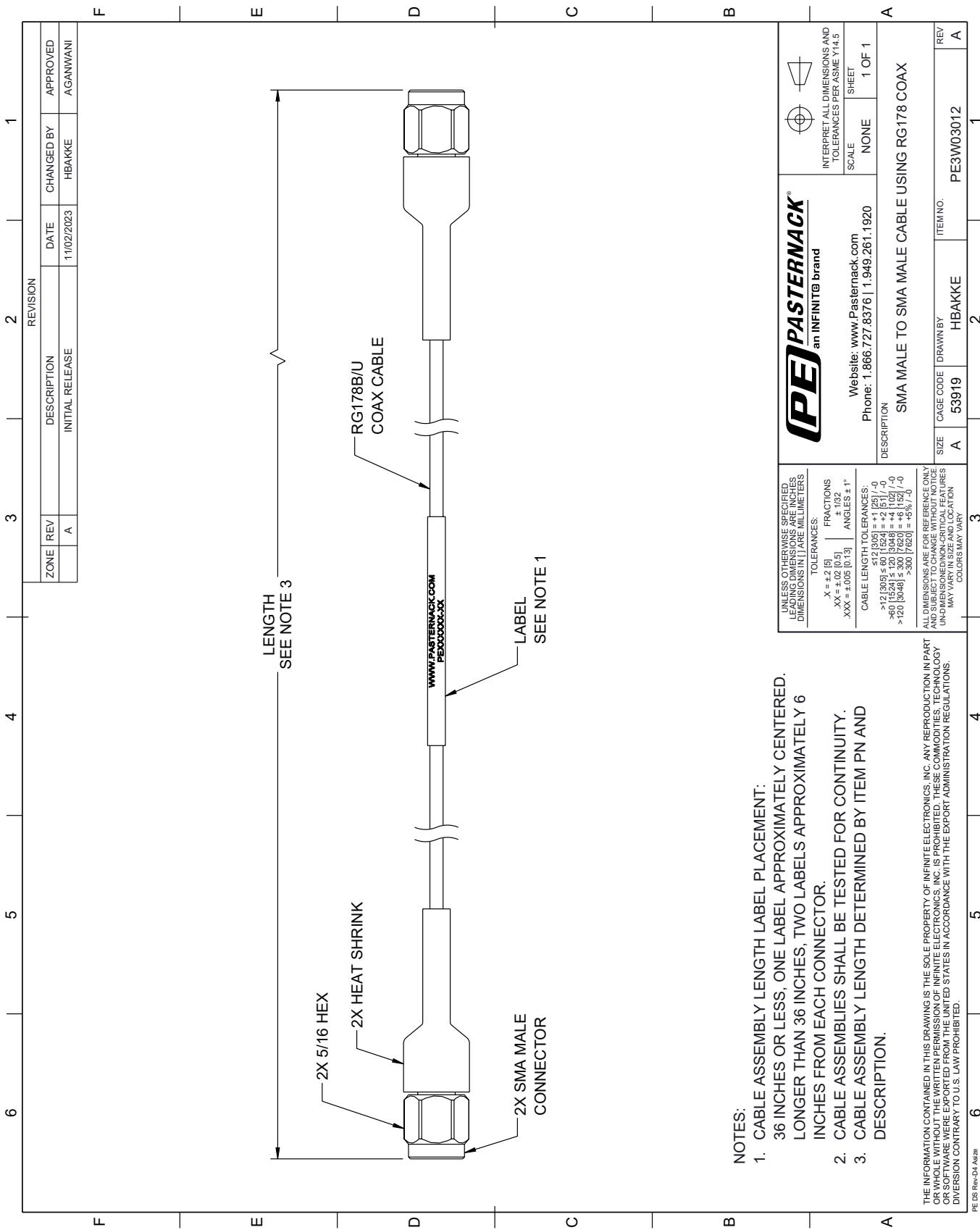
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Cable Using RG178 Coax PE3W03012](#)

URL: <https://www.pasternack.com/sma-male-to-sma-male-cable-using-rg178-pe3w03012-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3W03012 CAD Drawing

SMA Male to SMA Male Cable Using RG178 Coax



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|  PASTERNACK[®] an INFINITE [®] brand Website: www.pasternack.com Phone: 1.866.727.3376 1.949.261.1920 | | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE SHEET NONE 1 OF 1 |
| SMA MALE TO SMA MALE CABLE USING RG178 COAX | | |