

SMA Male to SMA Male Cable Using RG178 Coax

PE3W03012

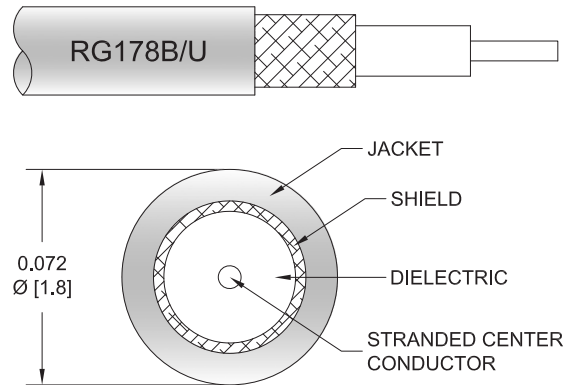


Configuration

- 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	Weight (lbs)
		Frequency	100	250	500	1000	MHz	
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 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin 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:

PE3W03012

- XX

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- Unit of Measure:
cm = Centimeters
<blank> = Inches

- Length

- Base Number

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

