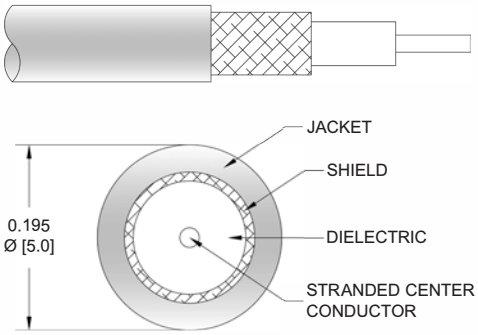
PASTERNACK
an INFINITE brand

SMA Male to SMB Plug Cable Using RG58 Coax

RF Cable Assemblies Technical Data Sheet PE3172

Configuration

- Connector 1: SMA Male
- Connector 2: SMB Plug
- Cable Type: RG58



Features

- Max Frequency 4 GHz
- 65.9% Phase Velocity
- PVC (NC) Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3172 SMA male to SMB plug cable using RG58 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 SMB cable assembly has a male to plug gender configuration with 50 ohm flexible RG58 coax. The PE3172 SMA male to SMB plug cable assembly operates to 4 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 SMB Plug Cable Using RG58 Coax PE3172

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		65.9		%
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.249	0.274	0.316	0.4	0.7	dB/ft
	0.82	0.9	1.04	1.31	2.3	dB/m
VSWR (Max.)	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	
Return Loss (Max.)	15.56	15.563	15.563	15.563	15.563	dB

Mechanical Specifications

Cable Assembly

Diameter	0.315 in [8 mm]

Cable

Cable Type	RG58
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Tin
Dielectric Type	PE
Number of Shields	1
Shield Layer 1	Tinned Copper Braid
Jacket Material	PVC (NC), Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.98 in [24.89 mm]
Repeated Minimum Bend Radius	1.96 in [49.78 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMB Plug
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	30 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	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range -40 to +80 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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How to Order

Part Number Configuration:

PE3172 - xx uu

- uu — Unit of Measure: cm = Centimeters, <blank> = Inches
- xx — Length
- PE3172 — Base Number

Example: PE3172-12 = 12 inches long cable
PE3172-100cm = 100 cm long cable

SMA Male to SMB Plug Cable Using RG58 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 SMB Plug Cable Using RG58 Coax PE3172

URL: https://www.pasternack.com/sma-male-smb-plug-rg58cu-cable-assembly-pe3172-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.

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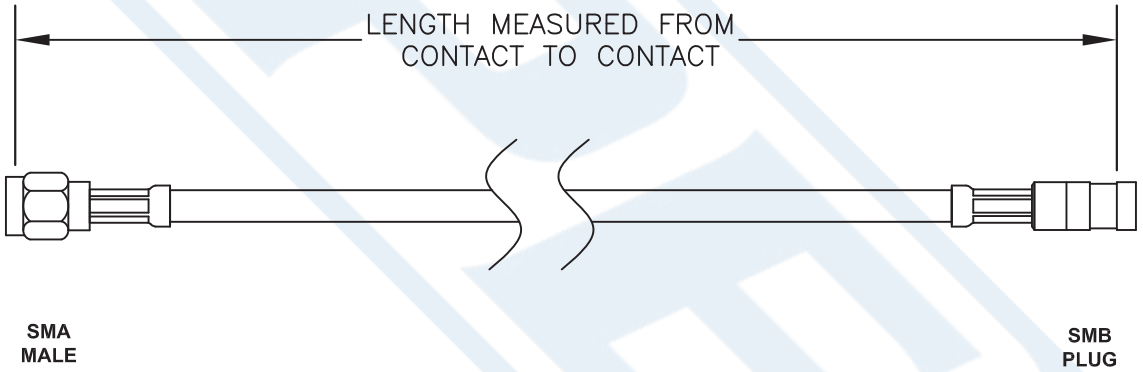
PE3172 CAD Drawing

SMA Male to SMB Plug Cable Using RG58 Coax

Standard Lengths	
-12	12"
-24	24"
-36	36"
-48	48"
-60	60"
-XXX	Custom Length in Inches



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DWG TITLE

PE3172-XX

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].
4. LENGTH TOLERANCE IS ± 1.5% OR 3/8", WHICHEVER IS GREATER.

REV. -	FSCM NO. 53919	CAD FILE 021907	SCALE N/A	SIZE A	127