

75 Ohm SMC Plug to 75 Ohm TNC Male Cable Using 75 Ohm RG179 Coax



PE3W16576

Configuration

- Connector 1: SMC Plug
- Connector 2: TNC Male
- Cable Type: RG179
- Coax Flex Type: Flexible

Features

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

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W16576 75 ohm SMC plug to 75 ohm TNC male cable using 75 ohm RG179 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 TNC cable assembly has a plug to male gender configuration with 75 ohm flexible RG179 coax. The PE3W16576 SMC plug to TNC 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	GHz
VSWR			1.5:1	
Velocity of Propagation		70		%
Capacitance		19.4 [63.65]		pF/ft [pF/m]
Operating Voltage (AC)			335	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
		Frequency	100	250	500	1000	MHz	
PE3W16576	Custom Lengths Available	Insertion Loss (Typ.)	0.09	0.14	0.184	0.203	dB/ft	
			0.3	0.45	0.61	0.67	dB/m	
PE3W16576-12	12 inch	Insertion Loss (Typ.)	0.37	0.41	0.46	0.48	dB	0.06
PE3W16576-24	24 inch	Insertion Loss (Typ.)	0.46	0.55	0.65	0.68	dB	0.069
PE3W16576-36	36 inch	Insertion Loss (Typ.)	0.55	0.69	0.83	0.89	dB	0.078
PE3W16576-48	48 inch	Insertion Loss (Typ.)	0.64	0.83	1.01	1.09	dB	0.087
PE3W16576-72	72 inch	Insertion Loss (Typ.)	0.82	1.1	1.38	1.5	dB	0.105

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:	0.173 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.06 pounds
Additional Weight per Inch:	0.00075 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.06 lbs [27.22 g]

Cable

Cable Type	RG179
Impedance	75 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	0.1 in [2.54 mm]
Repeated Minimum Bend Radius	0.4 in [10.16 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMC Plug	TNC Male
Impedance	75 Ohms	75 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	50 µin minimum
Dielectric Type	PTFE	
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	200 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	200 µin minimum

Environmental Specifications

Operating Range Temperature -55 to +125 deg C

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

Plotted and Other Data

Notes:

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PE3W16576

Typical Performance Data

How to Order

Part Number Configuration: **PE3W16576** **- xx** **uu**

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

Length

Base Number

Example: PE3W16576-12 = 12 inches long cable
PE3W16576-100cm = 100 cm long cable

75 Ohm SMC Plug to 75 Ohm TNC Male Cable Using 75 Ohm RG179 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: [75 Ohm SMC Plug to 75 Ohm TNC Male Cable Using 75 Ohm RG179 Coax PE3W16576](https://www.pasternack.com/75-ohm-smc-plug-to-75-ohm-tnc-male-cable-using-rg179-pe3w16576-p.aspx)

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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.

PE3W16576 CAD Drawing
75 Ohm SMC Plug to 75 Ohm TNC Male Cable Using 75 Ohm RG179 Coax

