2.4mm Male to 2.4mm Male Low Loss Test Cable Using PE-TC154A Coax

PE3C100069

Configuration

- Connector 1: 2.4mm Male
- Connector 2: 2.4mm Male
- Cable Type: PE-TC154A
- Coax Flex Type: Flexible

Features

- Max Frequency 40 GHz
- 77% Phase Velocity
- Double Shielded
- Ruggedized Aramid yarn Jacket
- Excellent Phase and Loss Stability with Flexure
- Low Loss Performance

Applications

- General Purpose
- Test & Measurement
- Laboratory Use
- VNA Test Port Extenders
- Semiconductor Probe Testing
- Precise Bench-Top Testing
- Lab and Production Testing

Description

Pasternack's PE3C100069 2.4mm male to 2.4mm male cable using PE-TC154A 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 2.4mm to 2.4mm cable assembly has a male to male gender configuration with 50 ohm flexible PE-TC154A coax. The PE3C100069 2.4mm male to 2.4mm male cable assembly operates to 40 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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		40	GHz
VSWR			1.4:1	
Velocity of Propagation		77		%
Phase Stability with Flexure		14		Degrees
Loss Stability with Flexure		0.1		dB

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	2500	5000	10000	20000	40000	MHz	
PE3C100069	Custom Lengths Available	Insertion Loss (Typ.)	0.18	0.262	0.383	0.568	0.853	dB/ft	
			0.6	0.86	1.26	1.87	2.8	dB/m	
PE3C100069-12	12 In	Insertion Loss (Typ.)	0.31	0.45	0.64	0.93	1.36	dB	0.432
PE3C100069-24	24 In	Insertion Loss (Typ.)	0.49	0.71	1.02	1.5	2.22	dB	0.464
PE3C100069-36	36 In	Insertion Loss (Typ.)	0.67	0.97	1.41	2.07	3.07	dB	0.496
PE3C100069-100CM	100 CM	Insertion Loss (Typ.)	0.72	1.04	1.51	2.23	3.31	dB	0.505
PE3C100069-150CM	150 Cm	Insertion Loss (Typ.)	1.02	1.47	2.14	3.16	4.71	dB	0.557

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:	0.4*SQRT(FGHz)	dB
Loss due to Connector 2:	0.4*SQRT(FGHz)	dB
Base Weight:	0.432	pounds
Additional Weight per Inch:	0.002667	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.432 lbs [195.95 g]

Cable

Cable Type	PE-TC154A
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	2
Shield Layer 1	Silver Plated Copper
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	Ruggedized Aramid yarn
Jacket Diameter	0.213 in [5.41 mm]
Repeated Minimum Bend Radius	0.98 in [24.89 mm]

Connectors

Description	Connector 1	Connector 2
Type	2.4mm Male	2.4mm Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	Polystyrene	Polystyrene
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel

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Environmental Specifications

Operating Range Temperature	-40 to +100 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration: **PE3C100069 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C100069 — Base Number

Example: PE3C100069-12 = 12 inches long cable
PE3C100069-100cm = 100 cm long cable

2.4mm Male to 2.4mm Male Low Loss Test Cable Using PE-TC154A 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: 2.4mm Male to 2.4mm Male Low Loss Test Cable Using PE-TC154A Coax PE3C100069

URL: https://www.pasternack.com/2.4mm-male-to-2.4mm-male-low-loss-test-cable-using-pe-tc154a-pe3c100069-p.aspx

PE3C100069 CAD Drawing

2.4mm Male to 2.4mm Male Low Loss Test Cable Using PE-TC154A Coax