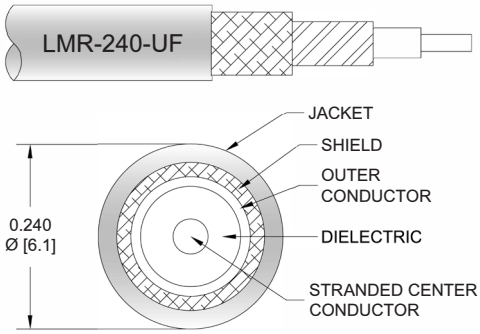
TNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax

PE3C5166

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible



Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5166 TNC male to TNC male cable using LMR-240-UF 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 TNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C5166 TNC male to TNC male cable assembly operates to 8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			500	Vrms
Dielectric Withstanding Voltage (AC)			1,500	Vrms

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2000	4000	8000	MHz	
PE3C5166	Custom Lengths Available	Insertion Loss (Typ.)	0.066	0.096	0.138	0.155	0.244	dB/ft	
			0.22	0.32	0.46	0.51	0.81	dB/m	
PE3C5166-12	12 inch	Insertion Loss (Typ.)	0.27	0.3	0.34	0.36	0.45	dB	0.115
PE3C5166-24	24 inch	Insertion Loss (Typ.)	0.34	0.4	0.48	0.51	0.69	dB	0.148
PE3C5166-36	36 inch	Insertion Loss (Typ.)	0.4	0.49	0.62	0.67	0.94	dB	0.18
PE3C5166-60	60 inch	Insertion Loss (Typ.)	0.53	0.68	0.89	0.98	1.42	dB	0.244
PE3C5166-300	300 inch	Insertion Loss (Typ.)	1.85	2.6	3.65	4.08	6.3	dB	0.884

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:	0.115	pounds
Additional Weight per Inch:	0.00267	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.115 lbs [52.16 g]

Cable

Cable Type	LMR-240-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	TPE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification		50 µinch
Dielectric Type	POM	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 µinch
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 µinch
Hex Size		8 12

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **PE3C5166 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C5166 — Base Number

Example: PE3C5166-12 = 12 inches long cable
PE3C5166-100cm = 100 cm long cable

TNC Male to TNC Male Low Loss Cable Using LMR-240-UF 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: TNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax PE3C5166

URL: https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-cable-using-lmr-240-uf-pe3c5166-p.aspx

PE3C5166 CAD Drawing

TNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax