



TNC Male to TNC Male Low Loss Cable Using LMR-240-DB 240-DB Coax with Times Microwave Components

TECHNICAL DATA SHEET

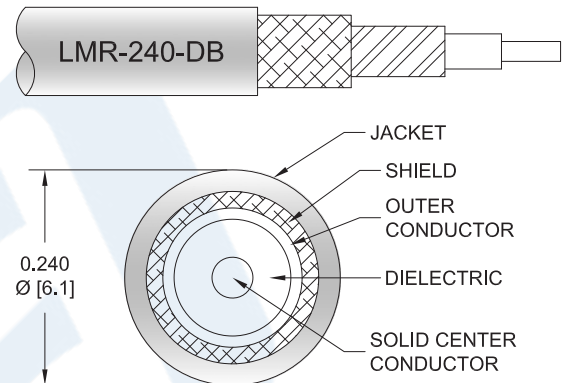
PE3W02499

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02499 TNC male to TNC male cable using LMR-240-DB 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-DB coax. The PE3W02499 TNC male to TNC male cable assembly operates to 6 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.

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-DB Coax with Times Microwave Components PE3W02499](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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		3.2 [10.5]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /1000ft [Ω /Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3W02499	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.13	0.2	dB/ft	
			0.14	0.2	0.27	0.43	0.66	dB/m	
PE3W02499-12	12 inch	Insertion Loss (Typ.)	0.13	0.19	0.26	0.39	0.65	dB	0.134
PE3W02499-24	24 inch	Insertion Loss (Typ.)	0.17	0.25	0.34	0.52	0.85	dB	0.169
PE3W02499-36	36 inch	Insertion Loss (Typ.)	0.21	0.31	0.42	0.65	1.05	dB	0.203
PE3W02499-48	48 inch	Insertion Loss (Typ.)	0.25	0.37	0.5	0.78	1.25	dB	0.237
PE3W02499-60	60 inch	Insertion Loss (Typ.)	0.29	0.43	0.58	0.91	1.45	dB	0.271

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*SQRT(FGHz) dB
 Loss due to Connector 2: 0.1*SQRT(FGHz) dB
 Base Weight: 0.134 pounds
 Additional Weight per Inch: 0.00284 pounds

Mechanical Specifications

Cable Assembly

Weight 0.134 lbs [60.78 g]

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Cable

Cable Type	LMR-240-DB
Impedance	50 Ohms
Inner Conductor Type	Solid
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	PE, 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	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male Threaded	TNC Male Threaded
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	Teflon	Teflon
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80µ in. minimum	80µ in. minimum
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	80µ in. minimum	80µ in. minimum
Torque	20 in-lbs [2.26 Nm]	20 in-lbs [2.26 Nm]

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

PE3W02499

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3W02499-12 = 12 inches long cable
PE3W02499-100cm = 100 cm long cable

TNC Male to TNC Male Low Loss Cable Using LMR-240-DB Coax with Times Microwave Components 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.

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URL: <https://www.pasternack.com/tnc-male-to-tnc-male-low-loss-cable-using-lmr-240-db-pe3w02499-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.

