



Reverse Polarity TNC Plug to Reverse Polarity TNC Plug Low Loss Cable Using LMR-240 Coax

TECHNICAL DATA SHEET

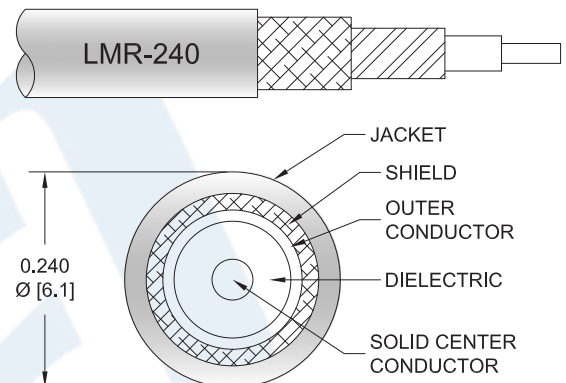
PE3C0448

Configuration

- Connector 1: TNC Plug Reverse Polarity
- Connector 2: TNC Plug Reverse Polarity
- Cable Type: LMR-240
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0448 reverse polarity TNC plug to reverse polarity TNC plug cable using LMR-240 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 reverse polarity TNC to reverse polarity TNC cable assembly has a plug to plug gender configuration with 50 ohm flexible LMR-240 coax. The PE3C0448 reverse polarity TNC plug to reverse polarity TNC plug cable assembly operates to 5.8 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity TNC Plug to Reverse Polarity TNC Plug Low Loss Cable Using LMR-240 Coax PE3C0448](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	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		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	5800	MHz	
PE3C0448	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.12	0.2	dB/ft	
			0.13	0.19	0.26	0.4	0.66	dB/m	
PE3C0448-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.32	0.4	dB	0.101
PE3C0448-24	24 inch	Insertion Loss (Typ.)	0.28	0.31	0.36	0.44	0.6	dB	0.134
PE3C0448-36	36 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.56	0.8	dB	0.167
PE3C0448-48	48 inch	Insertion Loss (Typ.)	0.36	0.42	0.52	0.68	1	dB	0.2
PE3C0448-60	60 inch	Insertion Loss (Typ.)	0.4	0.48	0.6	0.8	1.2	dB	0.233

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:	0.112 pounds
Additional Weight per Inch:	0.00184 pounds

Mechanical Specifications

Cable Assembly

Weight 0.101 lbs [45.81 g]

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Cable

Cable Type	LMR-240
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 Plug Reverse Polarity Threaded	TNC Plug Reverse Polarity Threaded
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Phosphor Bronze, Gold	Phosphor Bronze, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

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PE3C0448

How to Order

Part Number Configuration:

PE3C0448

- **xx**

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

Example: PE3C0448-12 = 12 inches long cable
PE3C0448-100cm = 100 cm long cable

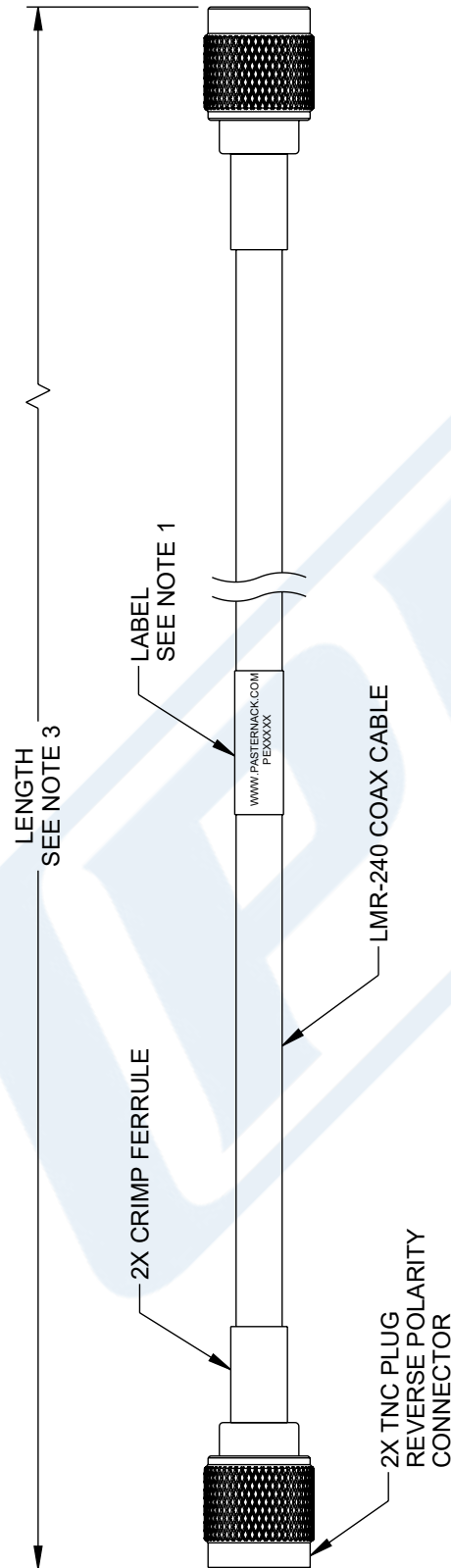
Reverse Polarity TNC Plug to Reverse Polarity TNC Plug Low Loss Cable Using LMR-240 Coax from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Reverse Polarity TNC Plug to Reverse Polarity TNC Plug Low Loss Cable Using LMR-240 Coax PE3C0448](https://www.pasternack.com/reverse-polarity-tnc-plug-to-reverse-polarity-tnc-plug-low-loss-cable-using-lmr-240-pe3c0448)

URL: <https://www.pasternack.com/reverse-polarity-tnc-plug-to-reverse-polarity-tnc-plug-low-loss-cable-using-lmr-240-pe3c0448-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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- NOTES:
1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS		 		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
TOLERANCES: FRACTIONS $X = \pm 2 [5]$ $XX = \pm .02 [0.5]$ $XXX = \pm .005 [0.13]$ ANGLES $\pm 1^\circ$ CABLE LENGTH TOLERANCES: $\leq 12 [305] = +1 [25] / -0$ $\pm 1/32$ $>12 [305] = +2 [51] / -0$ $>60 [1524] = +2 [51] / -0$ $>300 [7620] = +6 [152] / -0$ $>300 [7620] = +5\% / -0$		SCALE NONE SHEET 1 OF 1		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920
DESCRIPTION REVERSE POLARITY TNC PLUG TO REVERSE POLARITY TNC PLUG LOW LOSS CABLE USING LMR-240 COAX		ITEM NO. PE3C0448		REV A
ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UN-DIMENSIONED FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY		SIZE A		CAGE CODE 53919
DRAWN BY DMAY		REVISION 1		DATE 01/11/2017