

## BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components

### PE3W01457

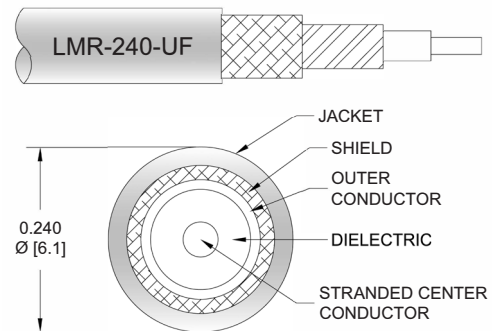


#### Configuration

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

#### Features

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W01457 BNC 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 BNC to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3W01457 BNC male to TNC male cable assembly operates to 4 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		4	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]
Dielectric Withstanding Voltage (AC)			500	Vrms

## BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components



### PE3W01457

#### 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	100	250	500	1000	4000	MHz	
PE3W01457	Custom Lengths Available	Insertion Loss (Typ.)	0.029	0.046	0.066	0.096	0.195	dB/ft	
			0.1	0.16	0.22	0.32	0.64	dB/m	
PE3W01457-12	12 inch	Insertion Loss (Typ.)	0.23	0.25	0.27	0.3	0.4	dB	0.115
PE3W01457-24	24 inch	Insertion Loss (Typ.)	0.26	0.3	0.34	0.4	0.59	dB	0.148
PE3W01457-36	36 inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.49	0.79	dB	0.18
PE3W01457-60	60 inch	Insertion Loss (Typ.)	0.35	0.43	0.53	0.68	1.18	dB	0.244
PE3W01457-300	300 inch	Insertion Loss (Typ.)	0.93	1.35	1.85	2.6	5.08	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]

## BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components



**PE3W01457**

### Connectors

Description	Connector 1	Connector 2
Type	BNC Male	TNC Male
Specification	MIL-STD-348	
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	PTFE	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 µinch
Coupling Nut Material and Plating	Brass, Nickel	Brass, Tri-Metal
Coupling Nut Plating Specification		80 µinch
Torque		8 in-lbs 0.9 Nm

### Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

### Plotted and Other Data

Notes:

## BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components



### PE3W01457

#### Typical Performance Data

#### How to Order

Part Number Configuration: **PE3W01457**    **- xx**    **uu**

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

Length

Base Number

Example: PE3W01457-12 = 12 inches long cable  
PE3W01457-100cm = 100 cm long cable

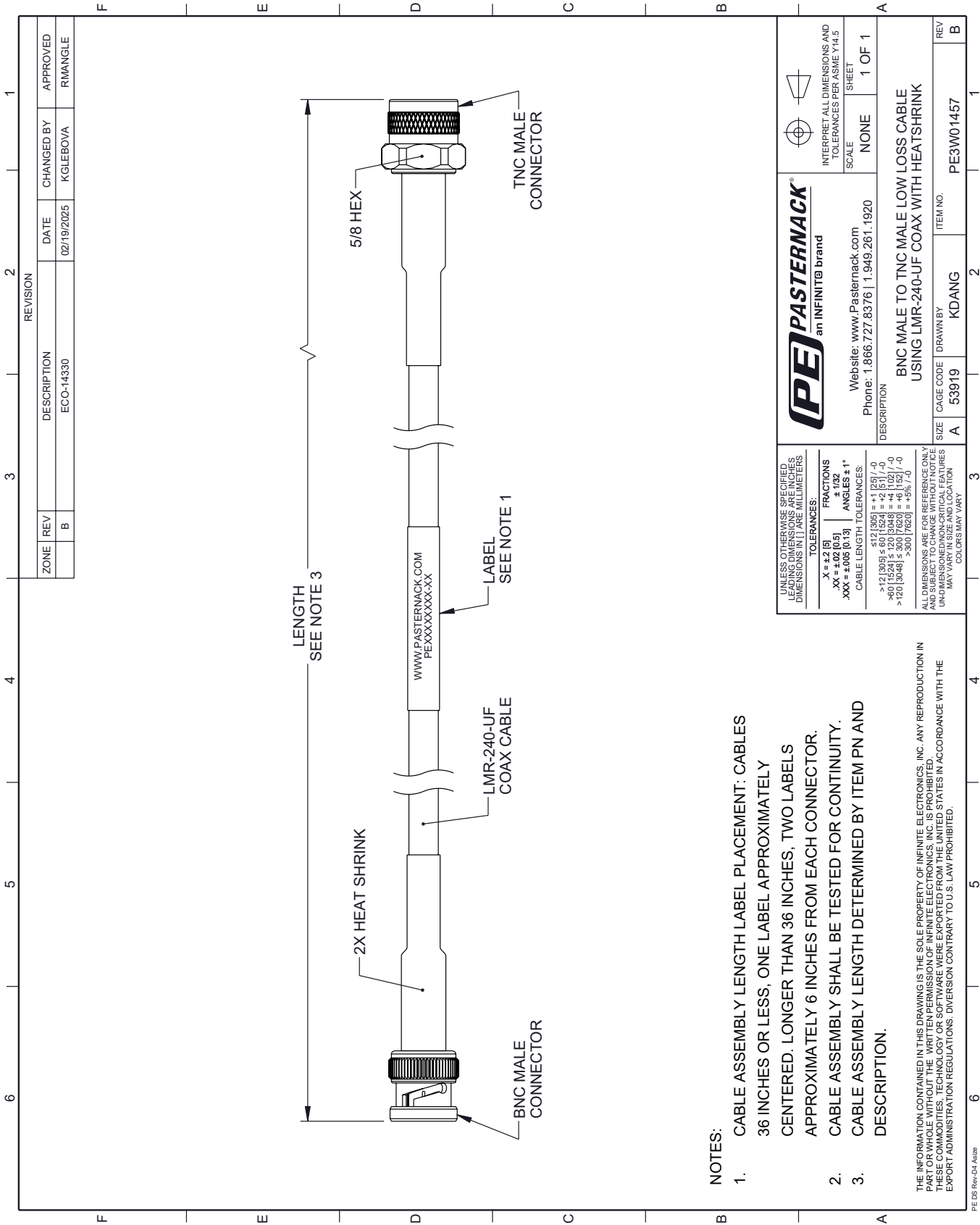
BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the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

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components PE3W01457](https://www.pasternack.com/bnc-male-to-tnc-male-low-loss-cable-using-lmr-240-uf-pe3w01457-p.aspx)

URL: <https://www.pasternack.com/bnc-male-to-tnc-male-low-loss-cable-using-lmr-240-uf-pe3w01457-p.aspx>

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.

PE3W01457 CAD Drawing
BNC Male to TNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components



- NOTES:
- 1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
  - 2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
  - 3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.