

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



### PE3C10322

#### Configuration

- Connector 1: BNC Male
- Connector 2: BNC 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 PE3C10322 BNC male to BNC 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 BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C10322 BNC male to BNC 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]

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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					MHz	
PE3C10322	Custom Lengths Available	Insertion Loss (Typ.)	0.028	0.046	0.066	0.095	0.193	dB/ft	
			0.1	0.16	0.22	0.32	0.64	dB/m	
PE3C10322-12	12 In	Insertion Loss (Typ.)	0.37	0.39	0.41	0.44	0.54	dB	0.164
PE3C10322-24	24 In	Insertion Loss (Typ.)	0.4	0.44	0.48	0.53	0.73	dB	0.197
PE3C10322-36	36 In	Insertion Loss (Typ.)	0.43	0.48	0.54	0.63	0.92	dB	0.229
PE3C10322-60	60 In	Insertion Loss (Typ.)	0.48	0.57	0.67	0.82	1.31	dB	0.293
PE3C10322-300	300 In	Insertion Loss (Typ.)	1.04	1.49	1.99	2.72	5.17	dB	0.933

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:	0.24 dB
Base Weight:	0.164 pounds
Additional Weight per Inch:	0.00267 pounds

#### Mechanical Specifications

##### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.164 lbs [74.39 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	BNC Male	BNC Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification		50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	

#### 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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### PE3C10322

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3C10322**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C10322-12 = 12 inches long cable  
PE3C10322-100cm = 100 cm long cable

BNC Male to BNC 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.

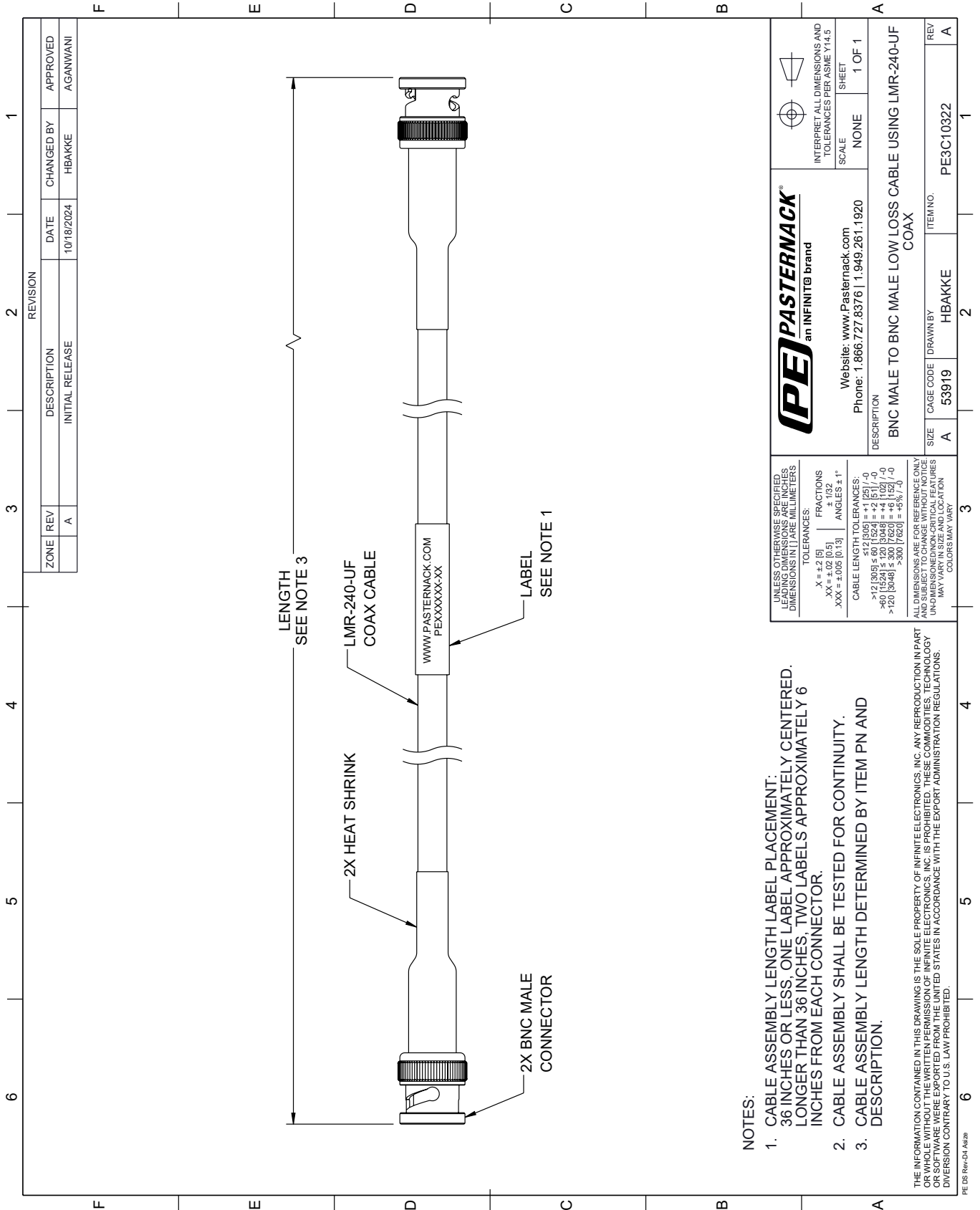
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [BNC Male to BNC Male Low Loss Cable Using LMR-240-UF Coax with Times Microwave Components PE3C10322](https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-240-uf-pe3c10322-p.aspx)

URL: <https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-240-uf-pe3c10322-p.aspx>

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# PE3C10322 CAD Drawing

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



**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 ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-04 Add2

REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	10/18/2024	HBAKKE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 an INFINITE brand		Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920	
		SCALE: NONE SHEET: 1 OF 1	
INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5			
DESCRIPTION BNC MALE TO BNC MALE LOW LOSS CABLE USING LMR-240-UF COAX			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	HBAKKE	PE3C10322

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES: ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0  
 >300 [7620] = ±.6% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.