

BNC Male to BNC Male Low Loss Cable Using LMR-240 Coax



PE3W05342

Configuration

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

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W05342 BNC male to BNC male 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 BNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. The PE3W05342 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		3.2 [10.5]		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	
PE3W05342	Custom Lengths Available	Insertion Loss (Typ.)	0.024	0.039	0.056	0.08	0.161	dB/ft	
			0.08	0.13	0.19	0.27	0.53	dB/m	
PE3W05342-12	12 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.28	0.37	dB	0.097
PE3W05342-24	24 inch	Insertion Loss (Typ.)	0.25	0.28	0.32	0.36	0.53	dB	0.13
PE3W05342-36	36 inch	Insertion Loss (Typ.)	0.28	0.32	0.37	0.44	0.69	dB	0.163
PE3W05342-48	48 inch	Insertion Loss (Typ.)	0.3	0.36	0.43	0.52	0.85	dB	0.196
PE3W05342-60	60 inch	Insertion Loss (Typ.)	0.32	0.4	0.48	0.6	1.01	dB	0.229

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:	0.097 pounds
Additional Weight per Inch:	0.00275 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	lbs [0 g]

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]

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Connectors

Description	Connector 1	Connector 2
Type	BNC Male	BNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	Teflon	Teflon
Outer Conductor Material and Plating	Beryllium Copper, Silver	Beryllium Copper, Silver
Body Material and Plating	Brass, Silver	Brass, Silver
Coupling Nut Material and Plating	Brass, Silver	Brass, Silver

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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PE3W05342

Typical Performance Data

How to Order

Part Number Configuration:

PE3W05342

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W05342-12 = 12 inches long cable
PE3W05342-100cm = 100 cm long cable

BNC Male to BNC Male 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: [BNC Male to BNC Male Low Loss Cable Using LMR-240 Coax PE3W05342](#)

URL: <https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-240-pe3w05342-p.aspx>

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PE3W05342 CAD Drawing

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