

BNC Male to SMA Male Right Angle Low Loss Cable Using LMR-240-UF Coax



PE3W12561

Configuration

- Connector 1: BNC Male
- Connector 2: SMA Male Right Angle
- 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 PE3W12561 BNC male to SMA male right angle 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3W12561 BNC male to SMA male cable assembly operates to 4 GHz. The right angle SMA interface on the LMR-240-UF cable allows for easier connections in tight spaces. 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						
PE3W12561	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	
PE3W12561-12	12 In	Insertion Loss (Typ.)	0.33	0.35	0.37	0.4	0.5	dB	0.079
PE3W12561-24	24 In	Insertion Loss (Typ.)	0.36	0.4	0.44	0.49	0.69	dB	0.112
PE3W12561-36	36 In	Insertion Loss (Typ.)	0.39	0.44	0.5	0.59	0.88	dB	0.144
PE3W12561-60	60 In	Insertion Loss (Typ.)	0.44	0.53	0.63	0.78	1.27	dB	0.208
PE3W12561-300	300 In	Insertion Loss (Typ.)	1	1.45	1.95	2.68	5.13	dB	0.848

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:	0.2 dB
Base Weight:	0.079 pounds
Additional Weight per Inch:	0.00267 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.079 lbs [35.83 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	SMA Male Right Angle
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass/Phosphor Bronze, Gold
Contact Plating Specification		50 μinch
Dielectric Type	POM	Teflon
Body Material and Plating	Brass, Nickel	Brass, Tri-Metal
Body Plating Specification		80 μinch
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		80 μinch
Hex Size		5/16 Inch
Torque		7 in-lbs 0.79 Nm

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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PE3W12561

Typical Performance Data

How to Order

Part Number Configuration:

PE3W12561

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W12561-12 = 12 inches long cable
PE3W12561-100cm = 100 cm long cable

BNC Male to SMA Male Right Angle Low Loss Cable Using LMR-240-UF 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 SMA Male Right Angle Low Loss Cable Using LMR-240-UF Coax PE3W12561](#)

URL: <https://www.pasternack.com/bnc-male-to-sma-male-low-loss-cable-using-lmr-240-uf-pe3w12561-p.aspx>

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PE3W12561 CAD Drawing

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