



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

TECHNICAL DATA SHEET

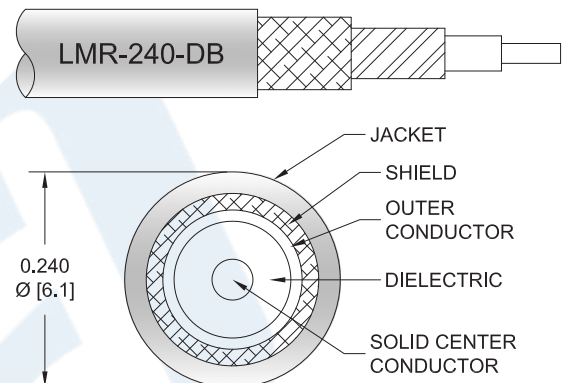
PE3W01878/HS

Configuration

- Connector 1: BNC Male
- Connector 2: BNC Male
- Cable Type: LMR-240-DB
- 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 PE3W01878/HS BNC male to BNC male cable using LMR-240-DB 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-DB coax. The PE3W01878/HS 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.

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-DB Coax with Times Microwave Components with HeatShrink PE3W01878/HS](#)



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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]		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	100	250	500	1000	4000	MHz	
PE3W01878/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.02	0.04	0.06	0.08	0.16	dB/ft	
			0.07	0.14	0.2	0.27	0.53	dB/m	
PE3W01878/HS-12	12 inch	Insertion Loss (Typ.)	0.09	0.14	0.21	0.28	0.56	dB	0.098
PE3W01878/HS-24	24 inch	Insertion Loss (Typ.)	0.11	0.18	0.27	0.36	0.72	dB	0.133
PE3W01878/HS-36	36 inch	Insertion Loss (Typ.)	0.13	0.22	0.33	0.44	0.88	dB	0.167
PE3W01878/HS-48	48 inch	Insertion Loss (Typ.)	0.15	0.26	0.39	0.52	1.04	dB	0.201
PE3W01878/HS-60	60 inch	Insertion Loss (Typ.)	0.17	0.3	0.45	0.6	1.2	dB	0.235

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*SQRT(FGHz) dB
 Loss due to Connector 2: 0.1*SQRT(FGHz) dB
 Base Weight: 0.098 pounds
 Additional Weight per Inch: 0.00284 pounds

Mechanical Specifications

Cable Assembly

Weight 0.098 lbs [44.45 g]

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-DB Coax with Times Microwave Components with HeatShrink PE3W01878/HS](#)



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Cable

Cable Type	LMR-240-DB
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	BNC Male Bayonet	BNC Male Bayonet
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

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Coax with Times Microwave Components with HeatShrink

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PE3W01878/HS

How to Order

Part Number Configuration:

PE3W01878/HS

- **xx**

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

Example: PE3W01878/HS-12 = 12 inches long cable
PE3W01878/HS-100cm = 100 cm long cable

BNC Male to BNC Male Low Loss Cable Using LMR-240-DB Coax with Times Microwave Components with HeatShrink 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-DB Coax with Times Microwave Components with HeatShrink PE3W01878/HS](#)

URL: <https://www.pasternack.com/bnc-male-to-bnc-male-low-loss-cable-using-lmr-240-db-with-heatshrink-pe3w01878-hs-p.aspx>

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PE3W01878/HS CAD Drawing

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

ZONE		REV.	DESCRIPTION		DATE	CHANGED BY	APPROVED BY
		A	INITIAL RELEASE		10/09/2023	BPUCHASKI	AGANWANI

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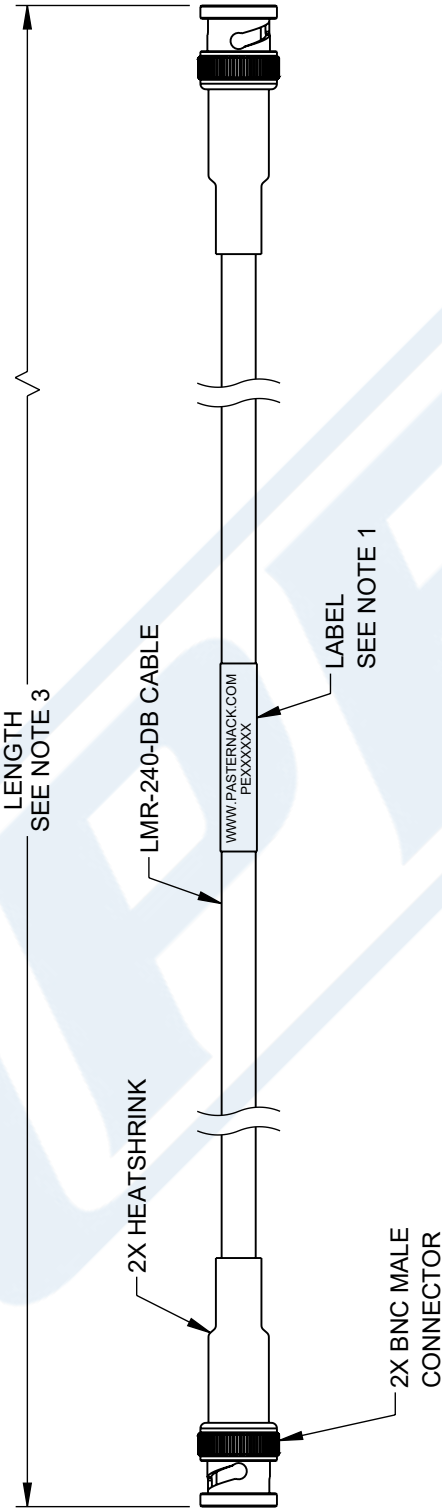
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NOTES:

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 IN INCHES DIMENSIONS IN [] ARE MILLIMETERS		SCALE NONE	
TOLERANCES: X = ±.2 [5] FRACTIONS XX = ±.02 [0.5] ± 1/32 XXX = ±.005 [0.13] ANGLES ± 1°		SHEET 1 OF 1	
CABLE LENGTH TOLERANCES: ≤12 [305] = +.125/-0 ≤36 [914] = +.25/-0 ≤60 [1524] = +.50/-0 ≤120 [3048] = +.75/-0 ≤300 [7620] = +1.50/-0 ≤600 [15240] = +3.00/-0 ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE. UN-DIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION COLORS MAY VARY		DESCRIPTION BNC MALE TO BNC MALE LOW LOSS CABLE USING LMR-240-DB COAX WITH TIMES MICROWAVE COMPONENTS WITH HEATSHRINK	
SIZE A		CAGE CODE 53919	ITEM NO. PE3W01878/HS
DRAWN BY BPUCHASKI		REV A	