



N Male to N Male Low Loss Cable Using LMR-240-DB Coax

TECHNICAL DATA SHEET

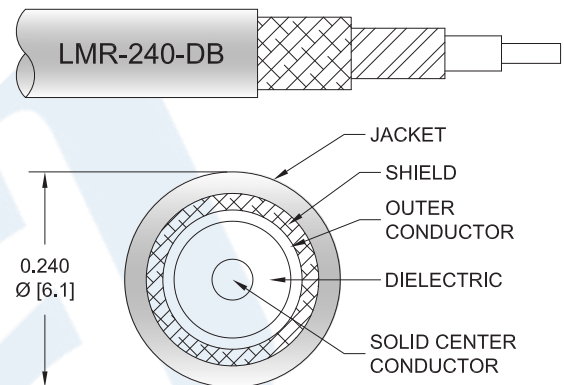
PE3W02851

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W02851 type N male to type N 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-DB coax. The PE3W02851 type N male to type N male cable assembly operates to 6 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: [N Male to N Male Low Loss Cable Using LMR-240-DB Coax PE3W02851](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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	250	500	1000	2500	6000	MHz	
PE3W02851	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.06	0.08	0.13	0.2	dB/ft	
			0.14	0.2	0.27	0.43	0.66	dB/m	
PE3W02851-12	12 inch	Insertion Loss (Typ.)	0.34	0.36	0.38	0.43	0.5	dB	0.172
PE3W02851-24	24 inch	Insertion Loss (Typ.)	0.38	0.42	0.46	0.56	0.7	dB	0.207
PE3W02851-36	36 inch	Insertion Loss (Typ.)	0.42	0.48	0.54	0.69	0.9	dB	0.241
PE3W02851-48	48 inch	Insertion Loss (Typ.)	0.46	0.54	0.62	0.82	1.1	dB	0.275
PE3W02851-60	60 inch	Insertion Loss (Typ.)	0.5	0.6	0.7	0.95	1.3	dB	0.309

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:	0.15 dB
Loss due to Connector 2:	0.15 dB
Base Weight:	0.172 pounds
Additional Weight per Inch:	0.00284 pounds

Mechanical Specifications

Cable Assembly

Weight 0.172 lbs [78.02 g]

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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	N Male Threaded	N Male Threaded
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

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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How to Order

Part Number Configuration:

PE3W02851

- **xx**

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

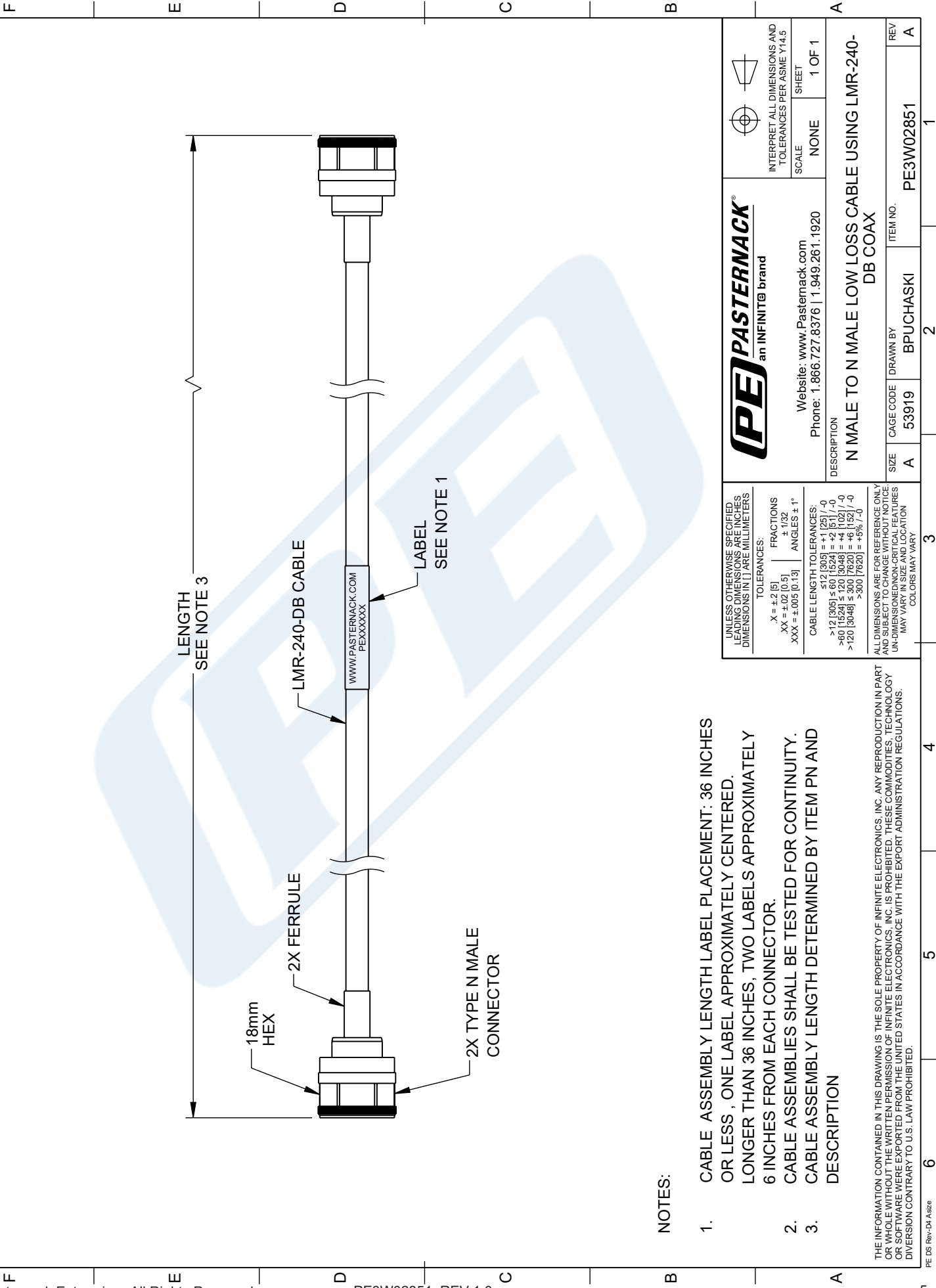
Example: PE3W02851-12 = 12 inches long cable
PE3W02851-100cm = 100 cm long cable

N Male to N Male Low Loss Cable Using LMR-240-DB 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: [N Male to N Male Low Loss Cable Using LMR-240-DB Coax PE3W02851](#)

URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-240-db-pe3w02851-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.


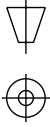


NOTES:

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

 an INFINIT@ brand			
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE	NONE
DESCRIPTION		SHEET	1 OF 1
N MALE TO N MALE LOW LOSS CABLE USING LMR-240-DB COAX			
SIZE	A	CAGE CODE	53919
DRAWN BY	BPUCHASKI	ITEM NO.	PE3W02851
REV	A		

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	± 1/32
XX = ±.02 [0.5]	± 1/64
XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
≤ 12 [305] = ±.125 [3.18] / -0	
>12 [305] ≤ 30 [762] = ±.25 [6.35] / -0	
>30 [762] ≤ 120 [3048] = ±.5 [12.7] / -0	
>120 [3048] ≤ 300 [7620] = ±1 [25.4] / -0	
>300 [7620] = ±5% / -0	
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS. MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.	