

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



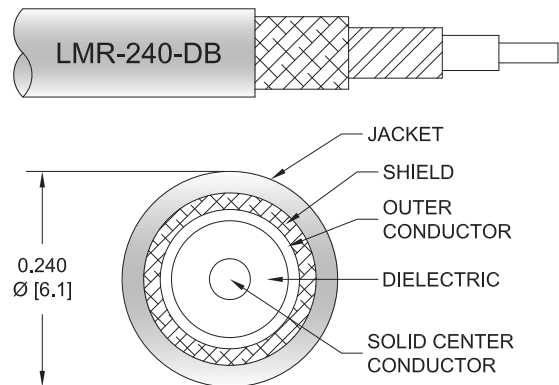
PE3C2185/HS

Configuration

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

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C2185/HS type N male to SMA 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-DB coax. The PE3C2185/HS type N male to SMA male cable assembly operates to 8 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		8	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]

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



PE3C2185/HS

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	
PE3C2185/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.039	0.056	0.076	0.129	0.204	dB/ft	
			0.13	0.19	0.25	0.43	0.67	dB/m	
PE3C2185/HS-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.41	dB	0.115
PE3C2185/HS-24	24 inch	Insertion Loss (Typ.)	0.28	0.32	0.36	0.46	0.61	dB	0.15
PE3C2185/HS-36	36 inch	Insertion Loss (Typ.)	0.32	0.37	0.43	0.59	0.82	dB	0.184
PE3C2185/HS-48	48 inch	Insertion Loss (Typ.)	0.36	0.43	0.51	0.72	1.02	dB	0.218
PE3C2185/HS-60	60 inch	Insertion Loss (Typ.)	0.4	0.48	0.58	0.85	1.22	dB	0.252

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:	0.115 pounds
Additional Weight per Inch:	0.00284 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.081 lbs [36.74 g]

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]

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



PE3C2185/HS

Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles		500
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	30 µin minimum	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Gold
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	Brass, Gold
Coupling Nut Plating Specification	100 µin minimum	
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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

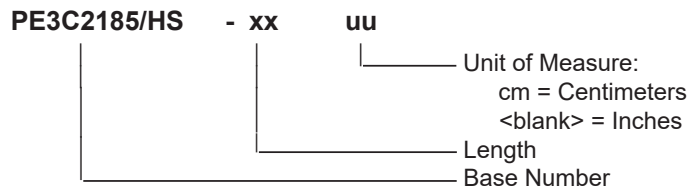


PE3C2185/HS

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C2185/HS-12 = 12 inches long cable
PE3C2185/HS-100cm = 100 cm long cable

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

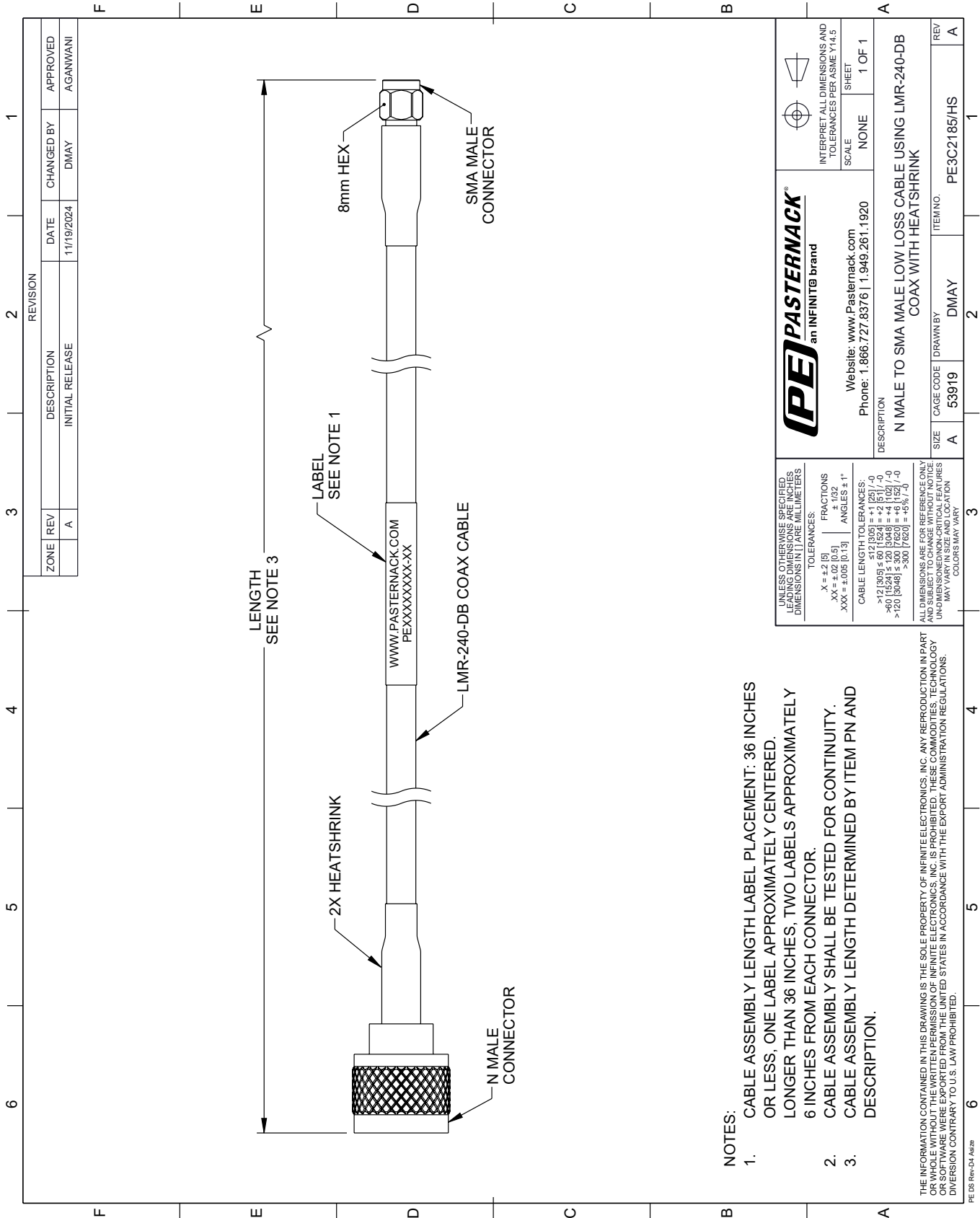
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to SMA Male Low Loss Cable Using LMR-240-DB Coax with HeatShrink PE3C2185/HS](#)

URL: <https://www.pasternack.com/n-male-to-sma-male-low-loss-cable-using-lmr-240-db-with-heatshrink-pe3c2185-hs-p.aspx>

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

PE3C2185/HS CAD Drawing

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



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.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SERVICES ARE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

PASTERNAK an INFINITE brand		Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS. TOLERANCES: .X = ±.2 (5) .XX = ±.02 (0.51) .XXX = ±.005 (0.13) FRACTIONS: ± 1/32 ANGLES: ± 1° CABLE LENGTH TOLERANCES: <12 (305) ±.60 (15.24) = ±.2 (5.1) / -0 >12 (305) ≤.60 (15.24) = ±.2 (5.1) / -0 >60 (1524) ≤.120 (3048) = ±.4 (10.2) / -0 >120 (3048) ≤.300 (7620) = ±.6 (15.2) / -0 >300 (7620) = ±.6 (15.2) / -0		DESCRIPTION N MALE TO SMA MALE LOW LOSS CABLE USING LMR-240-DB COAX WITH HEATSHRINK	REV: A
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS. COLORS MAY VARY.	SIZE: A CAGE CODE: 53919 DRAWN BY: DMAY	ITEM NO.: PE3C2185/HS	SHEET: 1 OF 1