

N Male to N Male Right Angle Low Loss Cable Using LMR-240-UF Coax with HeatShrink



PE3C1490/HS

Configuration

- Connector 1: N Male
- Connector 2: N Male Right Angle
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

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



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1490/HS type N male to type N 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 type N to type N cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. The PE3C1490/HS type N male to type N male cable assembly operates to 8 GHz. The right angle type N 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		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		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					MHz	
PE3C1490/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.066	0.096	0.138	0.155	0.244	dB/ft	
			0.22	0.32	0.46	0.51	0.81	dB/m	
PE3C1490/HS-12	12 Inch	Insertion Loss (Typ.)	0.37	0.4	0.44	0.46	0.55	dB	0.198
PE3C1490/HS-24	24 Inch	Insertion Loss (Typ.)	0.44	0.5	0.58	0.61	0.79	dB	0.231
PE3C1490/HS-36	36 Inch	Insertion Loss (Typ.)	0.5	0.59	0.72	0.77	1.04	dB	0.263
PE3C1490/HS-60	60 Inch	Insertion Loss (Typ.)	0.63	0.78	0.99	1.08	1.52	dB	0.327
PE3C1490/HS-300	300 Inch	Insertion Loss (Typ.)	1.95	2.7	3.75	4.18	6.4	dB	0.967

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:	0.198 pounds
Additional Weight per Inch:	0.00267 pounds

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.2 lbs [90.72 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	N Male	N Male Right Angle
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
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, Tri-Metal
Body Plating Specification	100 µin minimum	
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration:

PE3C1490/HS - xx uu



Example: PE3C1490/HS-12 = 12 inches long cable
PE3C1490/HS-100cm = 100 cm long cable

N Male to N Male Right Angle Low Loss Cable Using LMR-240-UF 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.

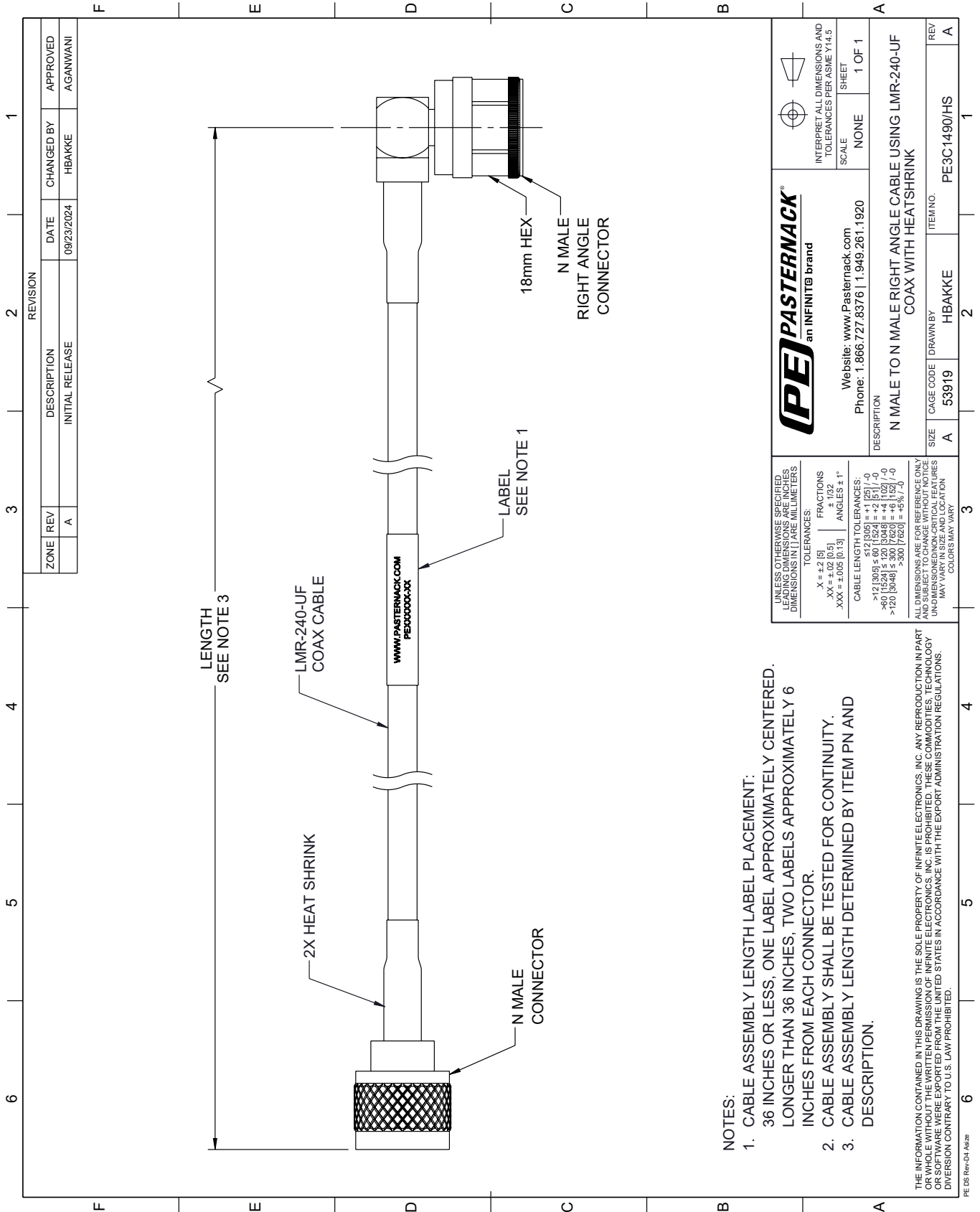
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Right Angle Low Loss Cable Using LMR-240-UF Coax with HeatShrink PE3C1490/HS](#)

URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-240-uf-with-heatshrink-pe3c1490-hs-p.aspx>

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PE3C1490/HS CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	09/23/2024	HBAKKE	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

 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
DESCRIPTION		
N MALE TO N MALE RIGHT ANGLE CABLE USING LMR-240-UF COAX WITH HEATSHRINK		
SIZE	CAGE CODE	ITEM NO.
A	53919	PE3C1490/HS
DRAWN BY		REV
HBAKKE		A

- 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.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS:
 ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0
 >300 [7620] = ±.8 [20.3] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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PE DS Rev-04 Add2