



## N Male to N Male Low Loss Cable Using LMR-240-UF Coax, LF Solder

### TECHNICAL DATA SHEET

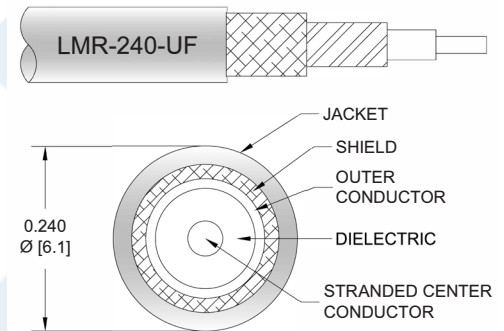
PE3C1642LF

#### Configuration

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

#### Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1642LF type N male to type N male 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 PE3C1642LF 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-UF Coax, LF Solder PE3C1642LF](#)



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**PE3C1642LF**

#### 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		4.28 [14.04]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		3.89 [12.76]		$\Omega$ /1000ft [ $\Omega$ /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	
PE3C1642LF	Custom Lengths Available	Insertion Loss (Typ.)	0.05	0.07	0.1	0.16	0.24	dB/ft	
			0.16	0.22	0.32	0.51	0.81	dB/m	
PE3C1642LF-12	12 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.36	0.45	dB	0.168
PE3C1642LF-24	24 inch	Insertion Loss (Typ.)	0.3	0.34	0.4	0.51	0.69	dB	0.201
PE3C1642LF-36	36 inch	Insertion Loss (Typ.)	0.34	0.4	0.49	0.67	0.94	dB	0.233
PE3C1642LF-60	60 inch	Insertion Loss (Typ.)	0.43	0.53	0.68	0.98	1.42	dB	0.297
PE3C1642LF-300	300 inch	Insertion Loss (Typ.)	1.35	1.85	2.6	4.08	6.3	dB	0.937

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:	0.168 pounds
Additional Weight per Inch:	0.00267 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.168 lbs [76.2 g]

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#### 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]

#### 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
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, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum

#### 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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## N Male to N Male Low Loss Cable Using LMR-240-UF Coax, LF Solder

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**PE3C1642LF**

#### How to Order

Part Number Configuration:

**PE3C1642LF - xx uu**

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

Example: PE3C1642LF-12 = 12 inches long cable  
PE3C1642LF-100cm = 100 cm long cable

N Male to N Male Low Loss Cable Using LMR-240-UF Coax, LF Solder 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.

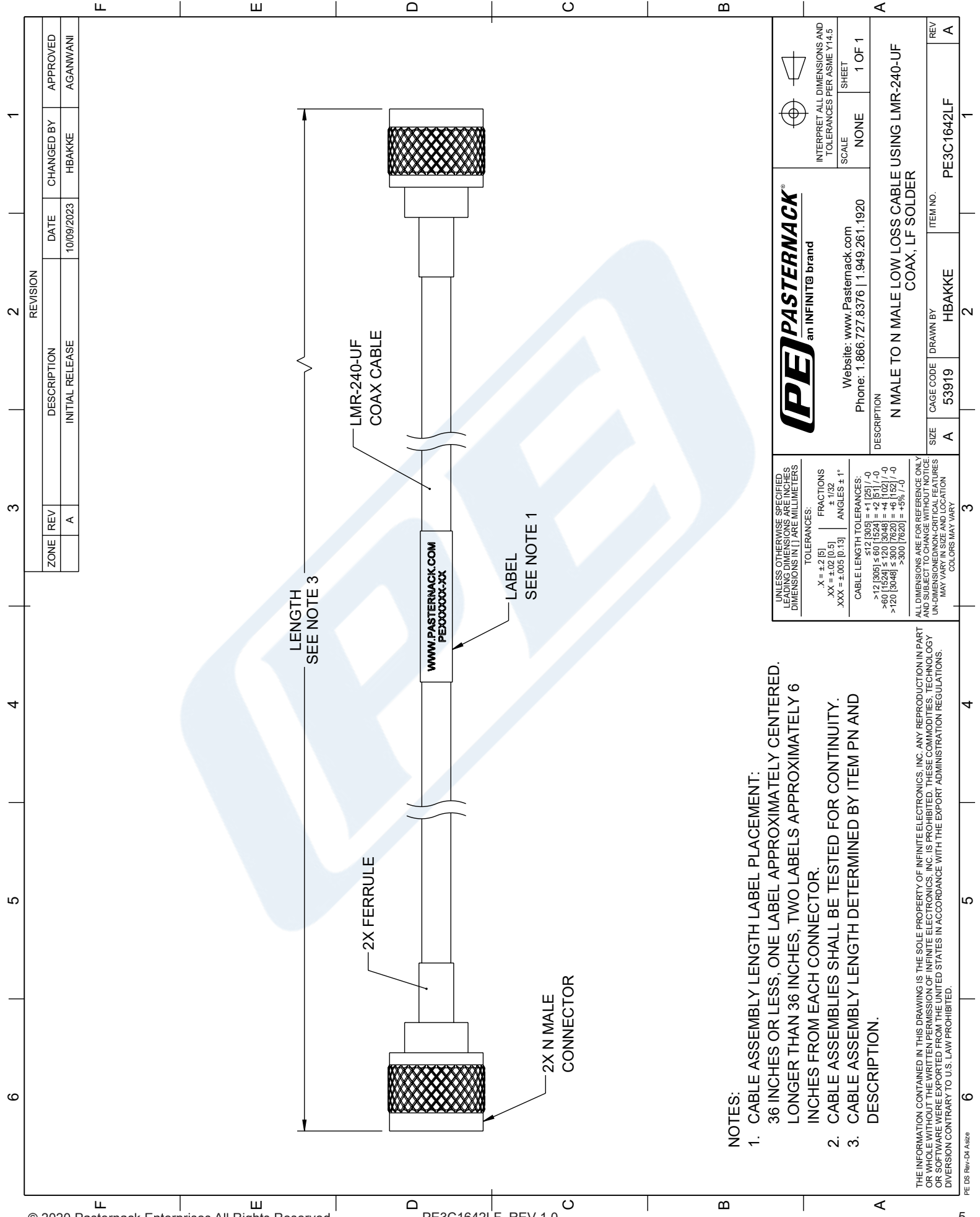
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URL: <https://www.pasternack.com/n-male-to-n-male-low-loss-cable-using-lmr-240-uf-lf-solder-pe3c1642lf-p.aspx>

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.

# PE3C1642LF CAD Drawing

N Male to N Male Low Loss Cable Using LMR-240-UF Coax, LF Solder



**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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<p><b>PASTERNAK</b> an INFINIT@ brand</p> <p>Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
	<p>DESCRIPTION: N MALE TO N MALE LOW LOSS CABLE USING LMR-240-UF COAX, LF SOLDER</p>
<p>UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:                  .X = ±.2 [5]                  .XX = ±.02 [0.5]                  .XXX = ±.005 [0.13]</p> <p>FRACTIONS:                  ±.1/32                  ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:                  ≤ 12 [305] = ±.1 [2.5] / -0                  ≤ 17 [432] = ±.1 [2.5] / -0                  ≤ 20 [508] = ±.1 [2.5] / -0                  ≤ 24 [609] = ±.1 [2.5] / -0                  ≤ 30 [762] = ±.1 [2.5] / -0                  ≤ 36 [914] = ±.1 [2.5] / -0                  &gt; 36 [914] = ±.1 [2.5] / -0</p>	<p>ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.</p>
<p>ZONE: A</p> <p>REV: A</p> <p>DESCRIPTION: INITIAL RELEASE</p> <p>DATE: 10/09/2023</p> <p>CHANGED BY: HBAKKE</p> <p>APPROVED: AGANWANI</p>	<p>SIZE: A</p> <p>CAGE CODE: 53919</p> <p>DRAWN BY: HBAKKE</p> <p>ITEM NO.: PE3C1642LF</p> <p>REV: A</p>