



N Male to N Male Low PIM Cable Using 1/2 inch Flexible Coax, LF Solder

TECHNICAL DATA SHEET

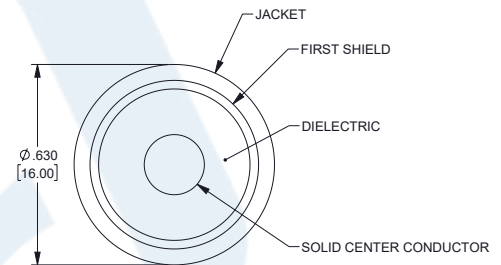
PE3C0433LF

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: 1/2" Flexible
- Coax Flex Type: Corrugated

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 120 dB
- 88% Phase Velocity
- PE Jacket



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3C0433LF type N male to type N male cable using 1/2 inch flexible coax is part of our full line of RF components available for same-day shipping. Pasternack's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. This Pasternack type N to type N cable assembly has a male to male gender configuration with 50 ohm corrugated 1/2" flexible coax. The PE3C0433LF type N male to type N male cable assembly operates to 3 GHz. Our low PIM design also offers excellent passive intermodulation performance.

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 PIM Cable Using 1/2 inch Flexible Coax, LF Solder PE3C0433LF](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		3	GHz
VSWR			1.4:1	
Velocity of Propagation		88		%
RF Shielding	120			dB
Capacitance		23.2 [76.12]		pF/ft [pF/m]
DC Resistance Inner Conductor		0.49 [1.61]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		0.73 [2.4]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
PE3C0433LF	Custom Lengths Available	Insertion Loss (Typ.)	0.01	0.01	0.01	0.02	0.04	dB/ft	
			0.02	0.03	0.05	0.08	0.14	dB/m	
PE3C0433LF-24	24 inch	Insertion Loss (Typ.)	0.22	0.22	0.23	0.25	0.28	dB	0.727
PE3C0433LF-48	48 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.29	0.36	dB	1.007
PE3C0433LF-60	60 inch	Insertion Loss (Typ.)	0.23	0.25	0.27	0.31	0.4	dB	1.147
PE3C0433LF-150CM	150 cm	Insertion Loss (Typ.)	0.23	0.25	0.27	0.31	0.4	dB	1.136
PE3C0433LF-200CM	200 cm	Insertion Loss (Typ.)	0.24	0.26	0.3	0.35	0.47	dB	1.365

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:	0.586 pounds
Additional Weight per Inch:	0.01167 pounds

Mechanical Specifications

Cable Assembly

Weight 0.586 lbs [265.81 g]

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Cable

Cable Type	1/2" Flexible
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	PE (F)
Number of Shields	1
Shield Layer 1	Annular Corrugated Copper Tube
Jacket Material	PE, Black
Jacket Diameter	0.629 in [15.98 mm]
One Time Minimum Bend Radius	2.75 in [69.85 mm]
Repeated Minimum Bend Radius	4.72 in [119.89 mm]
Typical Flex Cycles	15
Tensile Strength	270 lbs [122.47 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male Threaded	N Male Threaded
Specification	IEC 60169-16	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Spring Copper, Silver	Spring Copper, Silver
Contact Plating Specification	5 µm minimum	5 µm minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Nickel	Brass, Nickel
Outer Conductor Plating Specification	5 µm minimum	5 µm minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 µm minimum	2 µm minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	5 µm minimum	5 µm minimum
Hex Size	19 mm	19 mm
Torque	15 in-lbs [1.7 Nm]	15 in-lbs [1.7 Nm]

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3C0433LF - xx uu

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

Example: PE3C0433LF-12 = 12 inches long cable
PE3C0433LF-100cm = 100 cm long cable

N Male to N Male Low PIM Cable Using 1/2 inch Flexible 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.

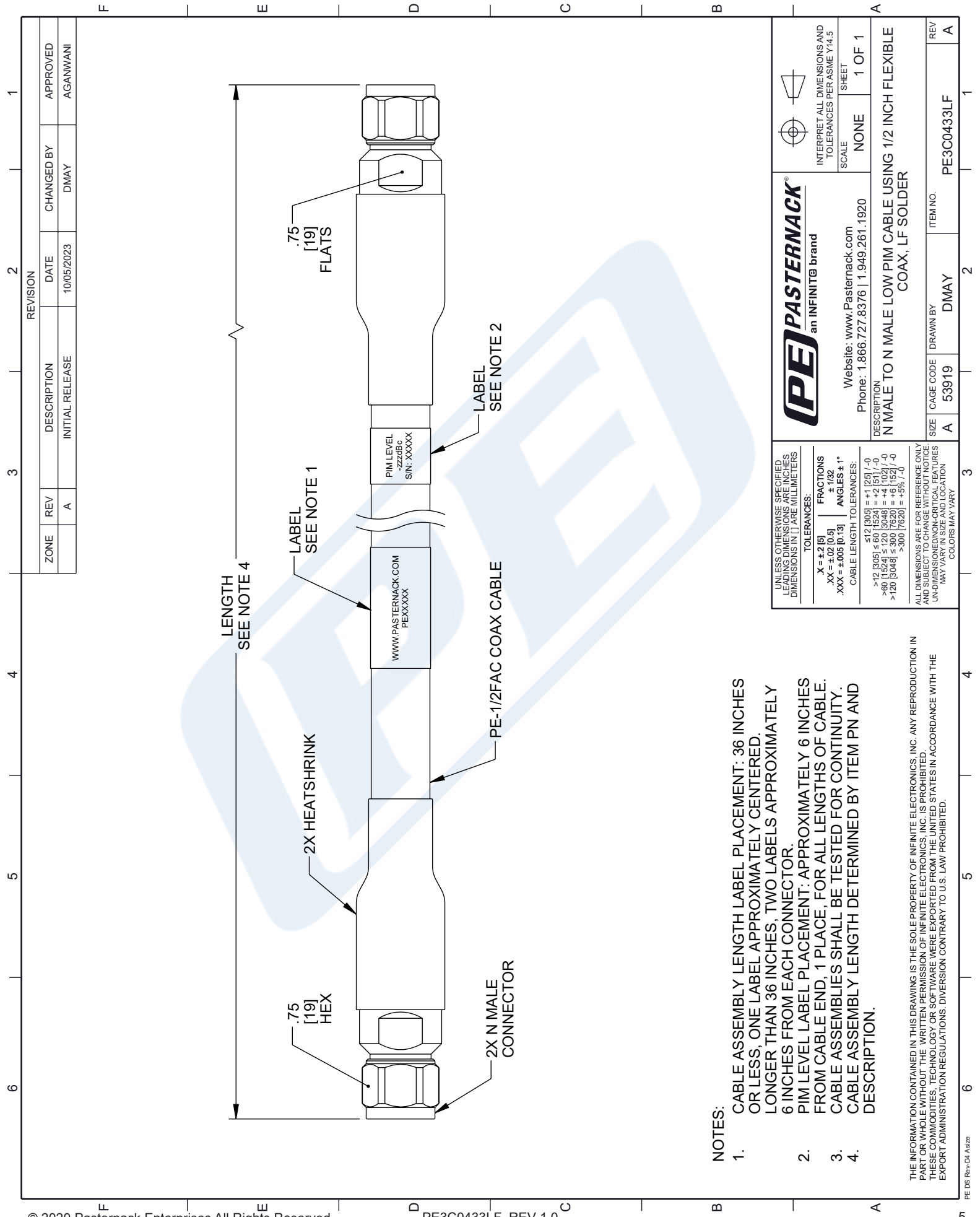
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URL: <https://www.pasternack.com/n-male-to-n-male-low-pim-cable-using-1-2-inch-flexible-lf-solder-pe3c0433lf-p.aspx>

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.

PE3C0433LF CAD Drawing

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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. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
Website: www.Pastermack.com Phone: 1.866.727.8376 1.949.261.1920		
DESCRIPTION: N MALE TO N MALE LOW PIM CABLE USING 1/2 INCH FLEXIBLE COAX, LF SOLDER		
UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE 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] ±.1 [2.5] / -0 >12 [305] ≤ 60 [1524] ±.2 [5.1] / -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 UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.		
SIZE A	CAGE CODE 53919	DRAWN BY DMAY
ITEM NO. PE3C0433LF		REV A

REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	10/05/2023
		CHANGED BY	DMAY
		APPROVED	AGANWANI