

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



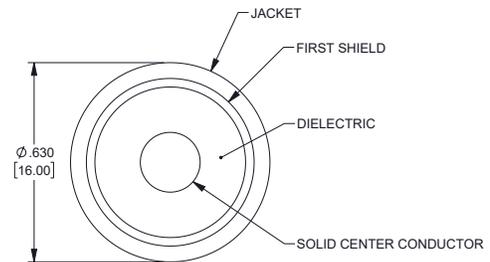
PE3C0433

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
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3C0433 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 PE3C0433 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.

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]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			2,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	3	GHz
Insertion Loss (Typ.)	0.006	0.009	0.014	0.022	0.04	dB/ft dB/m
	0.02	0.03	0.05	0.07	0.13	

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.586 lbs [265.81 g]

Cable

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

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
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

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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PE3C0433

Typical Performance Data

How to Order

Part Number Configuration:

PE3C0433

- xx

uu

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

Example: PE3C0433-12 = 12 inches long cable
PE3C0433-100cm = 100 cm long cable

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

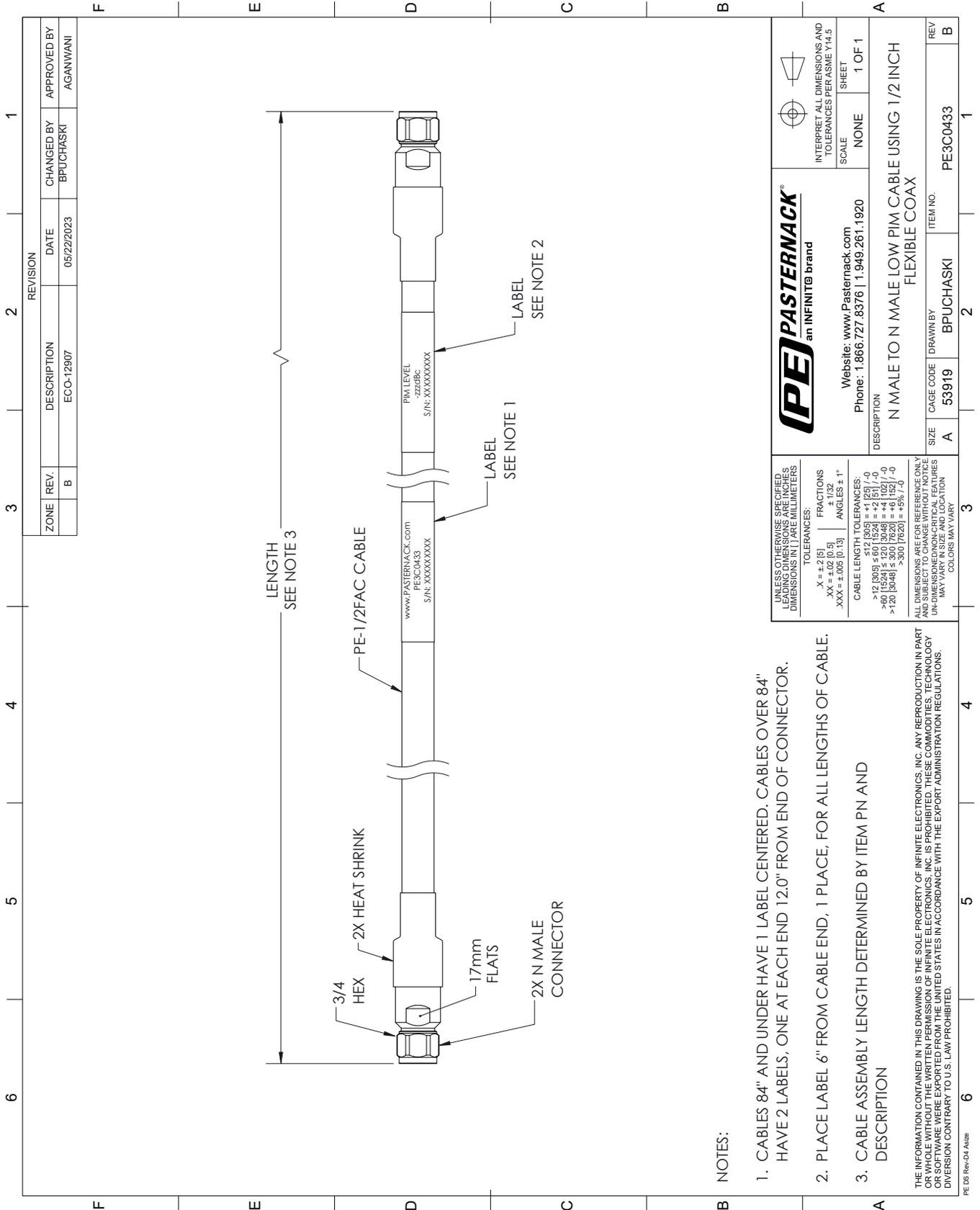
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Low PIM Cable Using 1/2 inch Flexible Coax PE3C0433](#)

URL: <https://www.pasternack.com/n-male-to-n-male-low-pim-cable-using-1-2-inch-flexible-pe3c0433-p.aspx>

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PE3C0433 CAD Drawing

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NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM END OF CONNECTOR.
2. PLACE LABEL 6" FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION

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PE DS Rev-D4 Add2b

REVISION		DATE	CHANGED BY	APPROVED BY
ZONE	REV.			
	B	05/22/2023	BPUCHASKI	AGANWANI
DESCRIPTION				
ECO-12907				

		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
		SCALE	NONE
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SHEET	1 OF 1
DESCRIPTION N MALE TO N MALE LOW PIM CABLE USING 1/2 INCH FLEXIBLE COAX			
SIZE	A	CAGE CODE	53919
DRAWN BY	BPUCHASKI	ITEM NO.	PE3C0433
REV	B		

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS.

TOLERANCES:
 X = ±.2(5) FRACTIONS
 .XX = ±.02 (0.5) ±.1(32)
 .XXX = ±.005 (0.13) ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 1-100 [2540] = ±.000 [0.00]
 >12 [305] ≤ 60 [1524] = ±.01 [0.25]
 >60 [1524] ≤ 120 [3048] = ±.02 [0.51]
 >120 [3048] ≤ 300 [7620] = ±.03 [0.76]
 >300 [7620] = ±.04 [1.02]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.