

N Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax



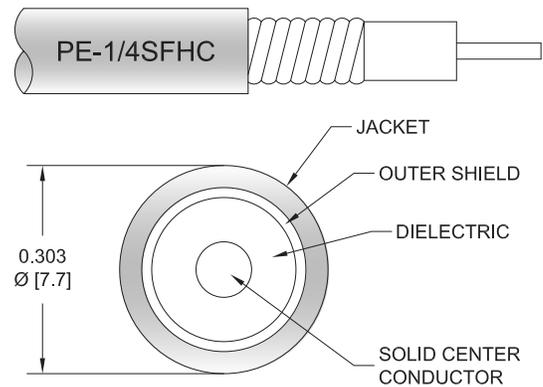
PE3C0124

Configuration

- Connector 1: N Male
- Connector 2: N Male
- Cable Type: 1/4" Superflexible
- Coax Flex Type: Corrugated

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3C0124 type N male to type N male cable using 1/4 inch superflexible 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 1/4" superflexible coax. The PE3C0124 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			1.21:1	
Velocity of Propagation		82		%
RF Shielding	120			dB
Capacitance		24.4 [80.05]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.53 [8.3]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			900	Vdc

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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 (Max.)	1.0164	1.026766	1.0394	1.0576	1.1073	dB/ft
	3.33	3.37	3.41	3.47	3.63	dB/m
VSWR (Max.)	1.21:1	1.21:1	1.21:1	1.21:1	1.21:1	
Return Loss (Max.)	20.44	20.444	20.444	20.444	20.444	dB

Mechanical Specifications

Cable Assembly

Width/Diameter	0.748 in [19 mm]
Weight	0.38 lbs [172.37 g]

Cable

Cable Type	1/4" Superflexible
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	Helically Corrugated Copper Tube
Jacket Material	PE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Typical Flex Cycles	20
Tensile Strength	79 lbs [35.83 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	N Male	N Male
Specification	IEC 60169-16	IEC 60169-16
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	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
Torque	15 in-lbs 1.7 Nm	

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

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PE3C0124

Typical Performance Data

How to Order

Part Number Configuration:

PE3C0124

- xx

uu

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

Example: PE3C0124-12 = 12 inches long cable
PE3C0124-100cm = 100 cm long cable

N Male to N Male Low PIM Cable Using 1/4 inch Superflexible 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.

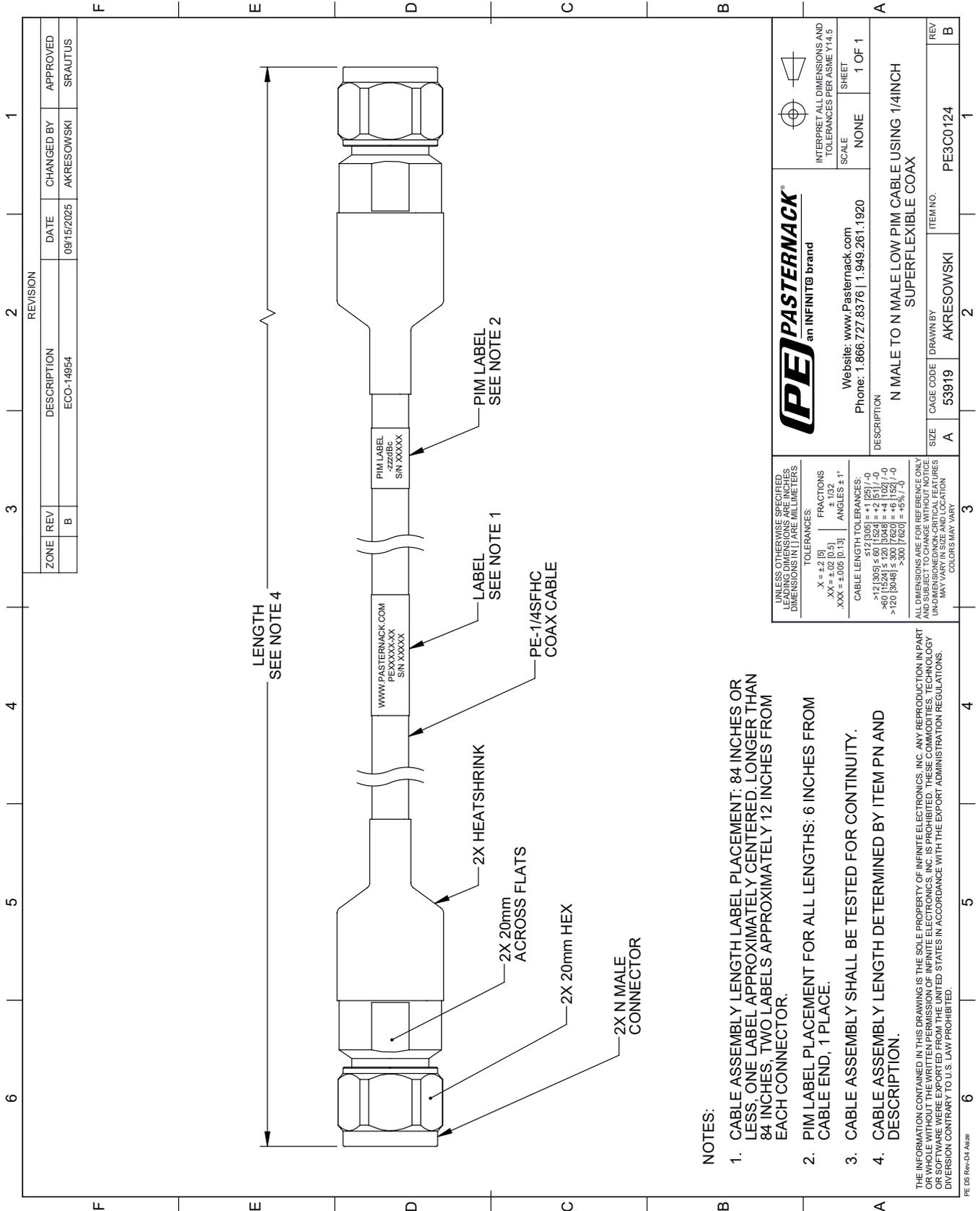
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [N Male to N Male Low PIM Cable Using 1/4 inch Superflexible Coax PE3C0124](#)

URL: <https://www.pasternack.com/n-male-to-n-male-cable-using-1-4-inch-superflexible-pe3c0124-p.aspx>

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PE3C0124 CAD Drawing

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NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. PIM LABEL PLACEMENT FOR ALL LENGTHS: 6 INCHES FROM CABLE END, 1 PLACE.
3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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PE DS Rev-D4 Add2

			
<p>PE PASTERNAK an INFINITE brand</p>			
<p>Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920</p>			
<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>		SCALE	SHEET
		NONE	1 OF 1
<p>DESCRIPTION N MALE TO N MALE LOW PIM CABLE USING 1/4 INCH SUPERFLEXIBLE COAX</p>			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	AKRESOWSKI	PE3C0124
REV			B

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. LEADING DIMENSIONS ARE IN MILLIMETERS. 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] = ±.2 [5] / -0
 <12 [305] ≤ 60 [1524] = ±.2 [5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0
 >300 [7620] = ±.8 [20] / -0

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