

N Male to N Male Low PIM Cable 48 Inch Length Using 1/4 inch Superflexible Coax

PE3C0124-48

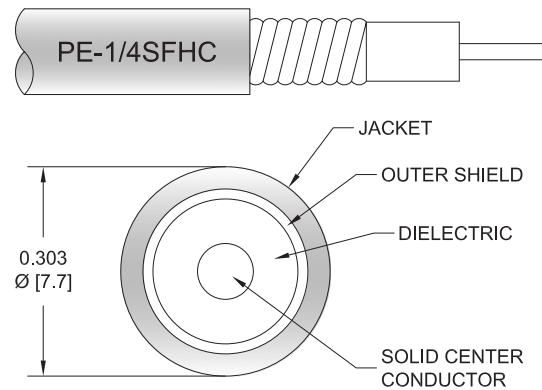


Configuration

- 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
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use
- Low PIM Applications

Description

Pasternack's PE3C0124-48 type N male to type N male 48 inch 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 PE3C0124-48 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]

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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.)	0.266	0.307	0.358	0.43	0.629	dB
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	20.481	dB

Mechanical Specifications

Cable Assembly

Width/Diameter	0.748 in [19 mm]
Weight	0.572 lbs [259.45 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
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	200 [5] μ in. [μ m] minimum	200 [5] μ in. [μ m] minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Outer Conductor Plating Specification	78 [2] μ in. [μ m] minimum	78 [2] μ in. [μ m] minimum
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	78 [2] μ in. [μ m] minimum	78 [2] μ in. [μ m] minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	200 [5] μ in. [μ m] minimum	200 [5] μ in. [μ m] minimum
Hex Size	19 mm	19 mm
Torque	15 in-lbs 1.7 Nm	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:
Values at 25°C, sea level.

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PE3C0124-48

Typical Performance Data

How to Order

Part Number Configuration:

PE3C0124

- xx

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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 48 Inch Length 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 48 Inch Length Using 1/4 inch Superflexible Coax PE3C0124-48](#)

URL: <https://www.pasternack.com/n-male-n-male-pe-1-4-sfhc-cable-assembly-pe3c0124-48-p.aspx>

The information contained within 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 Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C0124-48 CAD Drawing
N Male to N Male Low PIM Cable 48 Inch Length Using 1/4 inch Superflexible Coax

