



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

TECHNICAL DATA SHEET

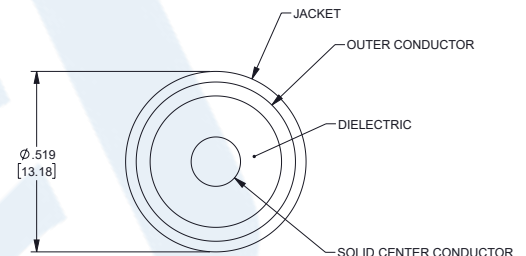
PE3C0347LF

Configuration

- Connector 1: N Male
- Connector 2: N Female
- Cable Type: 1/2" 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 PE3C0347LF type N male to type N female cable using 1/2 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 female gender configuration with 50 ohm corrugated 1/2" superflexible coax. The PE3C0347LF type N male to type N female 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 Female Low PIM Cable Using 1/2 inch Superflexible Coax, LF Solder PE3C0347LF](#)



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PE3C0347LF

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		25.3 [83.01]		pF/ft [pF/m]
Inductance		0.059 [0.19]		uH/ft [uH/m]
DC Resistance Inner Conductor		0.91 [2.99]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		1.08 [3.54]		Ω /1000ft [Ω /Km]
Dielectric Withstanding Voltage (AC)			2,500	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	3000	
PE3C0347LF	Custom Lengths Available	Insertion Loss (Typ.)	0.01	0.02	0.02	0.03	0.06	dB/ft	
			0.04	0.05	0.08	0.12	0.21	dB/m	
PE3C0347LF-24	24 inch	Insertion Loss (Typ.)	0.22	0.23	0.25	0.27	0.33	dB	0.536
PE3C0347LF-48	48 inch	Insertion Loss (Typ.)	0.24	0.26	0.3	0.34	0.46	dB	0.744
PE3C0347LF-60	60 inch	Insertion Loss (Typ.)	0.25	0.28	0.32	0.37	0.52	dB	0.848
PE3C0347LF-150CM	150 cm	Insertion Loss (Typ.)	0.25	0.28	0.32	0.37	0.52	dB	0.839
PE3C0347LF-200CM	200 cm	Insertion Loss (Typ.)	0.27	0.3	0.36	0.43	0.62	dB	1.01

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:	0.431 pounds
Additional Weight per Inch:	0.00867 pounds

Mechanical Specifications

Cable Assembly

Weight	0.431 lbs [195.5 g]
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Cable

Cable Type	1/2" 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	0.535 in [13.59 mm]
One Time Minimum Bend Radius	0.6 in [15.24 mm]
Repeated Minimum Bend Radius	1.18 in [29.97 mm]
Typical Flex Cycles	20
Tensile Strength	157 lbs [71.21 Kg]

Connectors

Description	Connector 1	Connector 2
Type	N Male Threaded	N Female Threaded
Specification	IEC 60169-16	IEC 60169-16
Impedance	50 Ohms	50 Ohms
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	TPX	TPX
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	
Coupling Nut Plating Specification	5 µm minimum	
Hex Size	20 mm	
Torque	15 in-lbs [1.7 Nm]	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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TECHNICAL DATA SHEET

PE3C0347LF

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3C0347LF - xx uu

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

Example: PE3C0347LF-12 = 12 inches long cable
PE3C0347LF-100cm = 100 cm long cable

N Male to N Female Low PIM Cable Using 1/2 inch Superflexible 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-female-low-pim-cable-using-1-2-inch-superflexible-lf-solder-pe3c0347lf-p.aspx>

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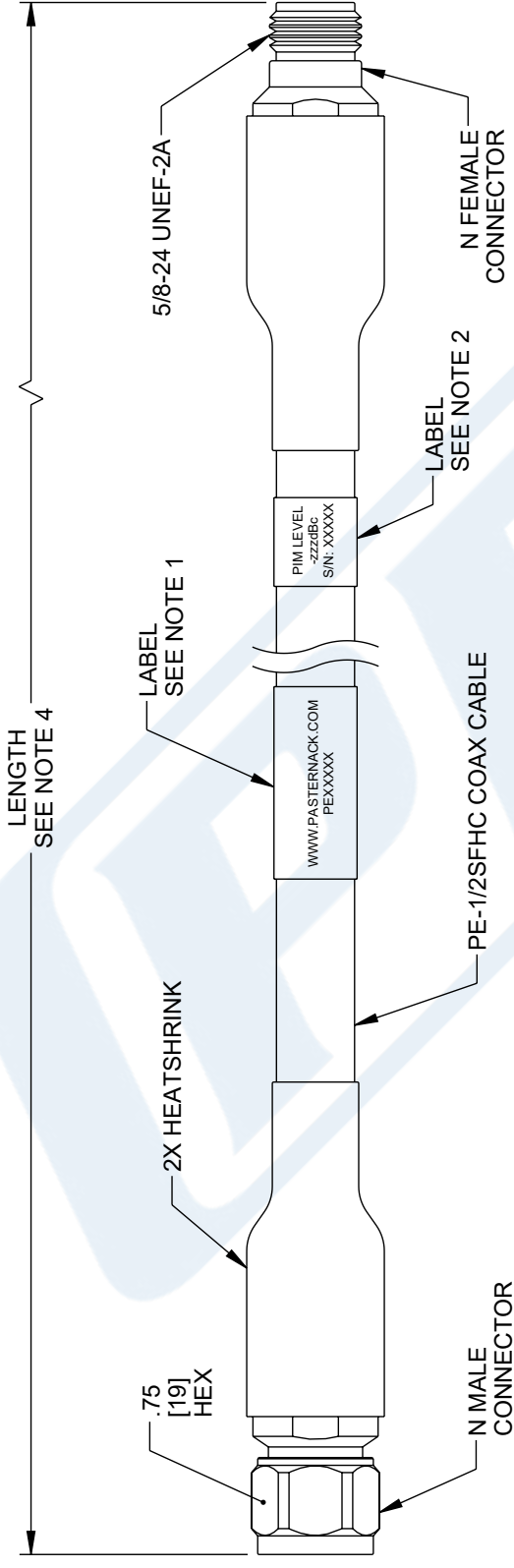
PE3C0347LF CAD Drawing

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

F E D C B A

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



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 ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
4. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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Website: www.Pasternack.com
Phone: 1.866.727.8376 | 1.949.261.1920

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE NONE
SHEET 1 OF 1

TOLERANCES:		FRACTIONS	
.X = ±.2 [5]	.XX = ±.02 [0.5]	± 1/32	± 1/16
.XXX = ±.005 [0.13]	ANGLES ± 1°	CABLE LENGTH TOLERANCES:	
		<12 [305]	± .1 [2.5]
		>12 [305] ≤ 60 [1524]	± .2 [5.1]
		>60 [1524] ≤ 120 [3048]	± .4 [10.2]
		>120 [3048] ≤ 300 [7620]	± .6 [15.2]
		>300 [7620]	± .8 [20.3]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

DESCRIPTION	SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
N MALE TO N FEMALE LOW PIM CABLE USING 1/2 INCH SUPERFLEXIBLE COAX, LF SOLDER	A	53919	DMAY	PE3C0347LF	A