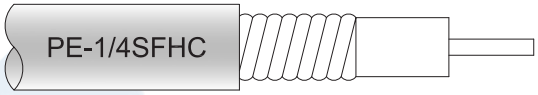
PASTERNACK
an INFINITE brand

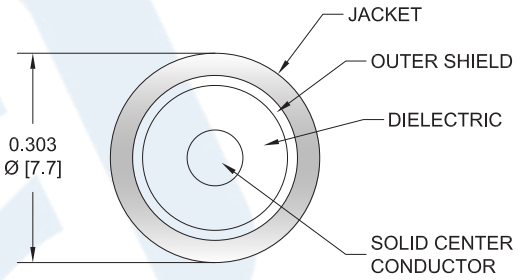
N Male Right Angle to N Female Low PIM Cable 12 Inch Length Using 1/4 inch Superflexible Coax

RF Cable Assemblies Technical Data Sheet PE3C7847-12

Configuration

- Connector 1: N Male Right Angle
- Connector 2: N Female
- Cable Type: 1/4” Superflexible





Features

- Max Frequency 6 GHz
- Low PIM: -150 dBc Max
- Shielding Effectivity > 120 dB
- 82% Phase Velocity
- PE Jacket
- Low PIM and Low Loss
- 100% Tested with PIM Test Results Marked on Cable

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Low PIM Applications and PIM Testing

Description

Pasternack’s PE3C7847-12 type N male right angle to type N female 12 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 female gender configuration with 50 ohm corrugated 1/4” superflexible coax. The PE3C7847-12 type N male to type N female cable assembly operates to 6 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -150 dBc. The right angle type N interface on the 1/4” superflexible cable allows for easier connections in tight spaces.

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		6	GHz
VSWR			1.5:1	
Velocity of Propagation		82		%
RF Shielding	120			dB
Passive Intermodulation			-150	dBc

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications: N Male Right Angle to N Female Low PIM Cable 12 Inch Length Using 1/4 inch Superflexible Coax PE3C7847-12

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor	2.53 [8.3]		Ω/1000ft [Ω/Km]
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.)	0.26	0.27	0.28	0.3	0.35	dB

Electrical Specification Notes:
The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated 0.15 dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Length*	12 in [304.8 mm]

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 Right Angle	N Female
Specification	IEC 61169-16	IEC 61169-16
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Silver	Bronze, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration: **PE3C7847 - xx uu**

- **uu** — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- **xx** — Length
- **PE3C7847** — Base Number

Example: PE3C7847-12 = 12 inches long cable
PE3C7847-100cm = 100 cm long cable

N Male Right Angle to N Female Low PIM Cable 12 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.

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URL: https://www.pasternack.com/n-male-n-female-pe-1-4-sfhc-cable-assembly-pe3c7847-12-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.

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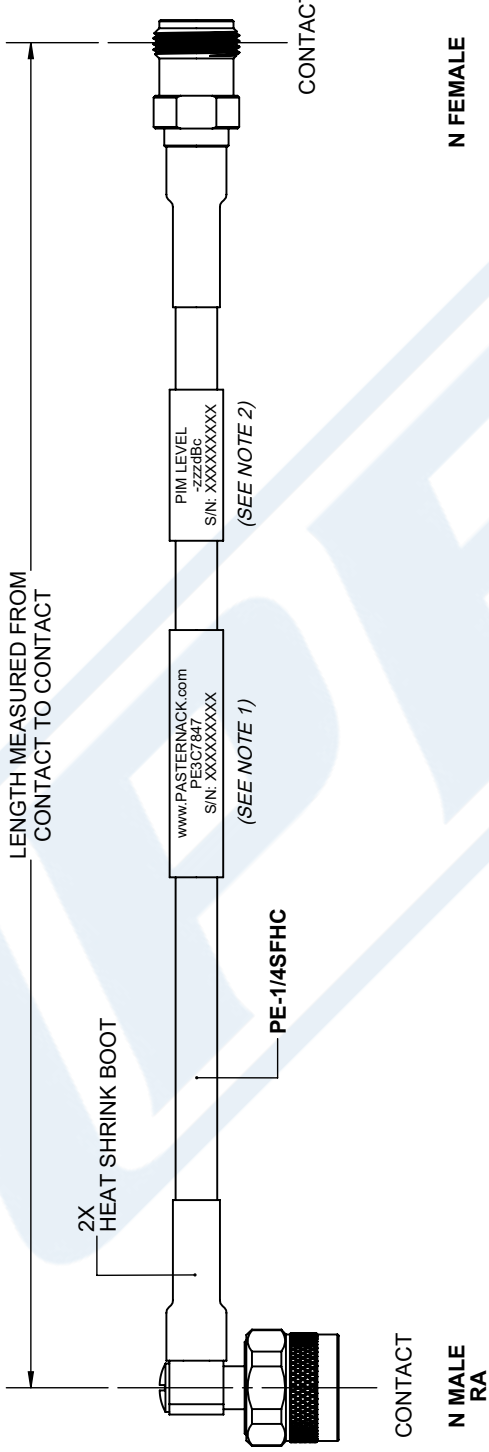
PE3C7847-12 CAD Drawing

N Male Right Angle to N Female Low PIM Cable 12 Inch Length Using 1/4 inch Superflexible Coax



REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	1/14/2021	S.ELLIS

NOTES:

1. CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12.0" FROM THE END OF THE CONNECTOR.
2. 6" FROM CABLE END 1 PLACE FOR ALL LENGTHS OF CABLE.

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:

.X = ± .2 [5.08] | FRACTIONS ± 1/32
.XX = ± .02 [.51] | ANGLES ± 1°
.XXX = ± .005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +5%L / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

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THIRD-ANGLE PROJECTION

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	K.DANG	PE3C7847	A

SHEET 1 OF 1
SCALE N/A

T-Rev.D