

SMP Female Right Angle to SMP Female Right Angle Non-Magnetic Cable Using PE-SR047-NM Coax



PE3C10851

Configuration

- Connector 1: SMP Female Right Angle
- Connector 2: SMP Female Right Angle
- Cable Type: PE-SR047-NM
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 12.4 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10851 SMP female right angle to SMP female right angle cable using PE-SR047-NM coax is part of our full line of RF components available for same-day shipping. Pasternack's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. This Pasternack SMP to SMP cable assembly has a female to female gender configuration with 50 ohm semi-rigid PE-SR047-NM coax. The PE3C10851 SMP female to SMP female cable assembly operates to 12.4 GHz. The right angle SMP interfaces on the PE-SR047-NM cable allow 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		12.4	GHz
VSWR			1.7:1	
Velocity of Propagation		69.5		%
RF Shielding	165			dB
Operating Voltage (AC)			250	Vrms
Dielectric Withstanding Voltage (AC)			500	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	500	1000	2500	5000	12400	
PE3C10851	Custom Lengths Available	Insertion Loss (Typ.)	0.24	0.34	0.508	0.79	1.266	dB/ft	
			0.79	1.12	1.67	2.6	4.16	dB/m	
PE3C10851-6	6 inch	Insertion Loss (Typ.)	0.46	0.51	0.6	0.74	0.98	dB	0.005
PE3C10851-9	9 inch	Insertion Loss (Typ.)	0.52	0.6	0.73	0.94	1.29	dB	0.006
PE3C10851-12	12 inch	Insertion Loss (Typ.)	0.58	0.68	0.85	1.13	1.61	dB	0.007
PE3C10851-18	18 inch	Insertion Loss (Typ.)	0.7	0.85	1.11	1.53	2.24	dB	0.01
PE3C10851-24	24 inch	Insertion Loss (Typ.)	0.82	1.02	1.36	1.92	2.88	dB	0.012

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: 0.17 dB
 Loss due to Connector 2: 0.17 dB
 Base Weight: 0.007 pounds
 Additional Weight per Inch: 0.00034 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.007 lbs [3.18 g]

Cable

Cable Type: PE-SR047-NM
 Impedance: 50 Ohms
 Inner Conductor Material and Plating: Copper, Silver
 Dielectric Type: PTFE
 Outer Conductor 1 Material and Plating: Copper
 One Time Minimum Bend Radius: 0.05 in [1.27 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMP Female Right Angle	SMP Female Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Copper	Beryllium Copper, Gold over Copper
Body Material and Plating	Bronze, Copper-Tin-Zinc Alloy over Silver	Bronze, Copper-Tin-Zinc Alloy over Silver

Environmental Specifications

Operating Range Temperature: -55 to +100 deg C

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PE3C10851

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

Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:

PE3C10851

- **xx**

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

Example: PE3C10851-12 = 12 inches long cable
PE3C10851-100cm = 100 cm long cable

SMP Female Right Angle to SMP Female Right Angle Non-Magnetic Cable Using PE-SR047-NM 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.

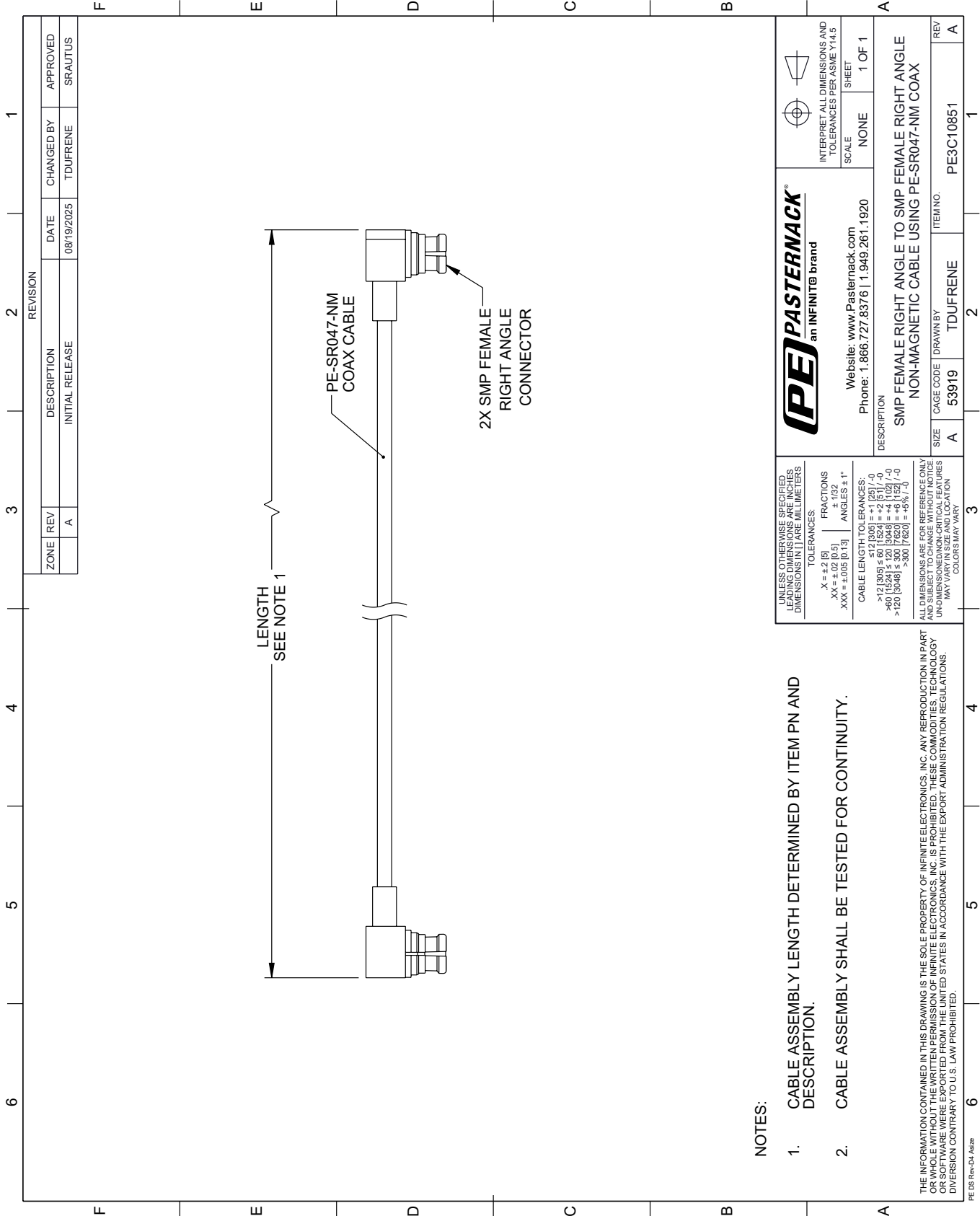
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle to SMP Female Right Angle Non-Magnetic Cable Using PE-SR047-NM Coax PE3C10851](#)

URL: <https://www.pasternack.com/smp-female-right-angle-to-smp-female-non-magnetic-cable-using-pe-sr047-nm-pe3c10851-p.aspx>

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PE3C10851 CAD Drawing

SMP Female Right Angle to SMP Female Right Angle Non-Magnetic Cable Using PE-SR047-NM Coax



REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	08/19/2025	TDUFRENE	SRAUTUS

NOTES:

1. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
2. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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<p>PASTERNAK an INFINITe brand</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>Website: www.Pasternack.com</p> <p>Phone: 1.866.727.8376 1.949.261.1920</p>		
<p>DESCRIPTION: SMP FEMALE RIGHT ANGLE TO SMP FEMALE RIGHT ANGLE NON-MAGNETIC CABLE USING PE-SR047-NM COAX</p>		
SIZE	CAGE CODE	ITEM NO.
A	53919	TDUFRENE
DRAWN BY		REV
A		A

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES:

.X = ±.2 [5]	FRACTIONS ± 1/32
.XX = ±.02 [0.5]	ANGLES ± 1°
.XXX = ±.005 [0.13]	

CABLE LENGTH TOLERANCES:

<12 [305]	±.1 [2.5]
>12 [305] ≤ 60 [1524]	±.2 [5]
>60 [1524] ≤ 120 [3048]	±.4 [102]
>120 [3048]	±.8 [20.3]

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