

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



PE3C10850

Configuration

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

Features

- Max Frequency 40 GHz
- Shielding Effectivity > 165 dB
- 69.5% Phase Velocity

Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C10850 SMP female to SMP female 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 PE3C10850 SMP female to SMP female cable assembly operates to 40 GHz.

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		40	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	165			dB

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	2500	5000	10000	20000	40000	
PE3C10850	Custom Lengths Available	Insertion Loss (Typ.)	0.508	0.79	1.14	1.65	2.45	dB/ft	
			1.67	2.6	3.75	5.42	8.04	dB/m	
PE3C10850-6	6 inch	Insertion Loss (Typ.)	0.35	0.53	0.76	1.1	1.61	dB	0.202
PE3C10850-9	9 inch	Insertion Loss (Typ.)	0.48	0.73	1.05	1.51	2.22	dB	0.203
PE3C10850-12	12 inch	Insertion Loss (Typ.)	0.61	0.93	1.33	1.92	2.83	dB	0.204
PE3C10850-18	18 inch	Insertion Loss (Typ.)	0.86	1.32	1.9	2.75	4.06	dB	0.207
PE3C10850-24	24 inch	Insertion Loss (Typ.)	1.12	1.72	2.47	3.57	5.28	dB	0.209

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: 0.03*SQRT(FGHz) dB
 Loss due to Connector 2: 0.03*SQRT(FGHz) dB
 Base Weight: 0.204 pounds
 Additional Weight per Inch: 0.00034 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.204 lbs [92.53 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	SMP Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	Gold Plated Beryllium Copper	Gold Plated Beryllium Copper
Body Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold

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Environmental Specifications

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

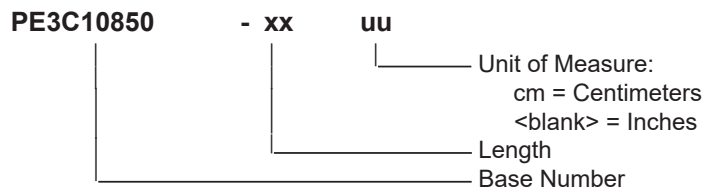
Plotted and Other Data

Notes:

Typical Performance Data

How to Order

Part Number Configuration:



Example: PE3C10850-12 = 12 inches long cable
PE3C10850-100cm = 100 cm long cable

SMP Female to SMP Female 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.

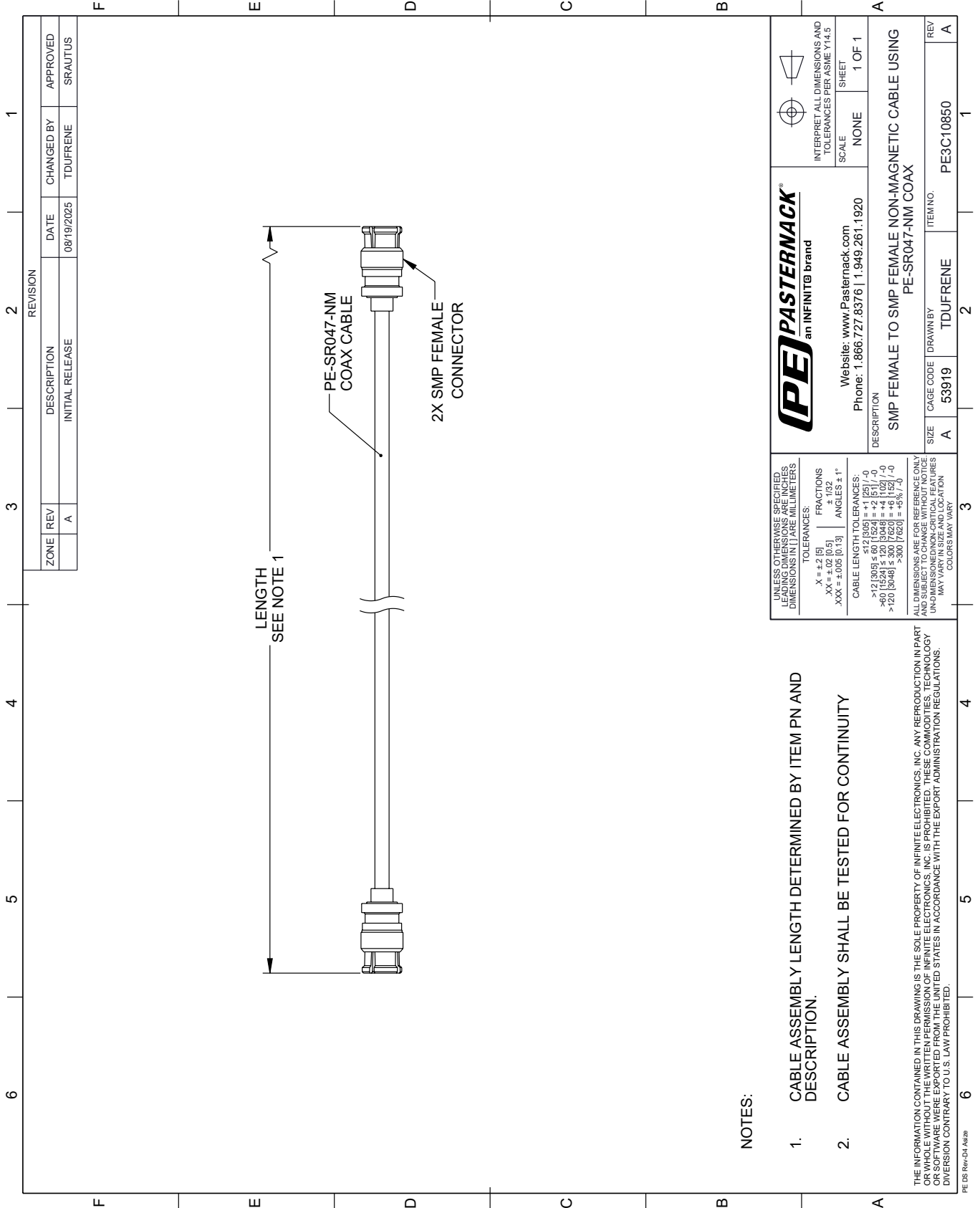
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female to SMP Female Non-Magnetic Cable Using PE-SR047-NM Coax PE3C10850](#)

URL: <https://www.pasternack.com/smp-female-to-smp-female-non-magnetic-cable-using-pe-sr047-nm-pe3c10850-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.

PE3C10850 CAD Drawing

SMP Female to SMP Female 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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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	
SMP FEMALE TO SMP FEMALE NON-MAGNETIC CABLE USING PE-SR047-NM COAX			
DESCRIPTION	SIZE	CAGE CODE	ITEM NO.
	A	53919	PE3C10850
DRAWN BY		REV	
TDUFRENE		A	

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

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

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/UNCLEAR FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

PE DS Rev-04 Add2