

SMA Male to SMA Male Cable Using PE-SR047AL Coax

TECHNICAL DATA SHEET

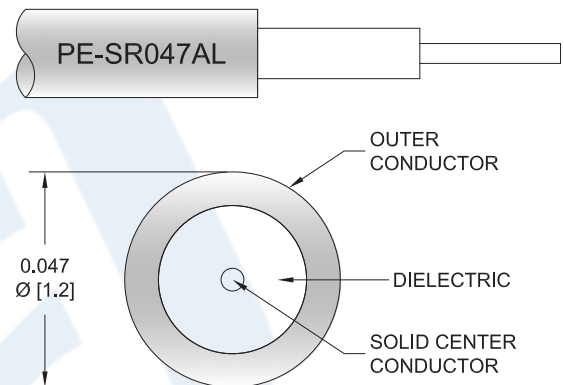
PE3W05547

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: PE-SR047AL
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 69.5% Phase Velocity
- 500 Mating Cycles



Applications

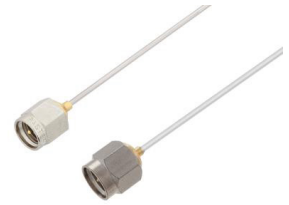
- General Purpose
- Laboratory Use

Description

Pasternack's PE3W05547 SMA male to SMA male cable using PE-SR047AL 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 SMA to SMA cable assembly has a male to male gender configuration with 50 ohm semi-rigid PE-SR047AL coax. The PE3W05547 SMA male to SMA male cable assembly operates to 18 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Cable Using PE-SR047AL Coax PE3W05547](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	90			dB

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	#####	MHz	
PE3W05547	Custom Lengths Available	Insertion Loss (Typ.)	0.41	0.5	0.75	1.2	1.7	dB/ft	
			1.35	1.65	2.47	3.94	5.58	dB/m	
PE3W05547-6	6 inch	Insertion Loss (Typ.)	0.41	0.45	0.58	0.8	1.05	dB	0.022
PE3W05547-12	12 inch	Insertion Loss (Typ.)	0.61	0.7	0.95	1.4	1.9	dB	0.023
PE3W05547-24	24 inch	Insertion Loss (Typ.)	1.02	1.2	1.7	2.6	3.6	dB	0.026
PE3W05547-36	36 inch	Insertion Loss (Typ.)	1.43	1.7	2.45	3.8	5.3	dB	0.028
PE3W05547-48	48 inch	Insertion Loss (Typ.)	1.84	2.2	3.2	5	7	dB	0.031

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:	0.023 pounds
Additional Weight per Inch:	0.0002 pounds

Electrical Specification Notes:

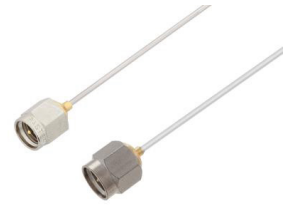
Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.023 lbs [10.43 g]

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Cable

Cable Type	PE-SR047AL
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Number of Shields	1
Outer Conductor Material and Plating	Tinned Aluminum

Repeated Minimum Bend Radius 0.05 in [1.27 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Threaded	SMA Male Threaded
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold over Nickel	Stainless Steel, Gold
Body Plating Specification	50 µin minimum	MIL-G-45204
Coupling Nut Material and Plating	Brass, Nickel	Passivated Stainless Steel
Coupling Nut Plating Specification	50 µin minimum	ASTM-A380
Hex Size	5/16 inch	5/16 inch
Torque	7 in-lbs [0.79 Nm]	8 in-lbs [0.9 Nm]

Environmental Specifications

Temperature

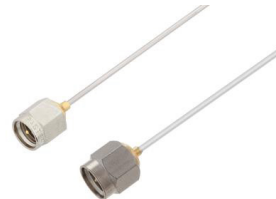
Operating Range -55 to +100 deg C

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

Plotted and Other Data

Notes:

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TECHNICAL DATA SHEET

PE3W05547

How to Order

Part Number Configuration:

PE3W05547

- **xx**

uu

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

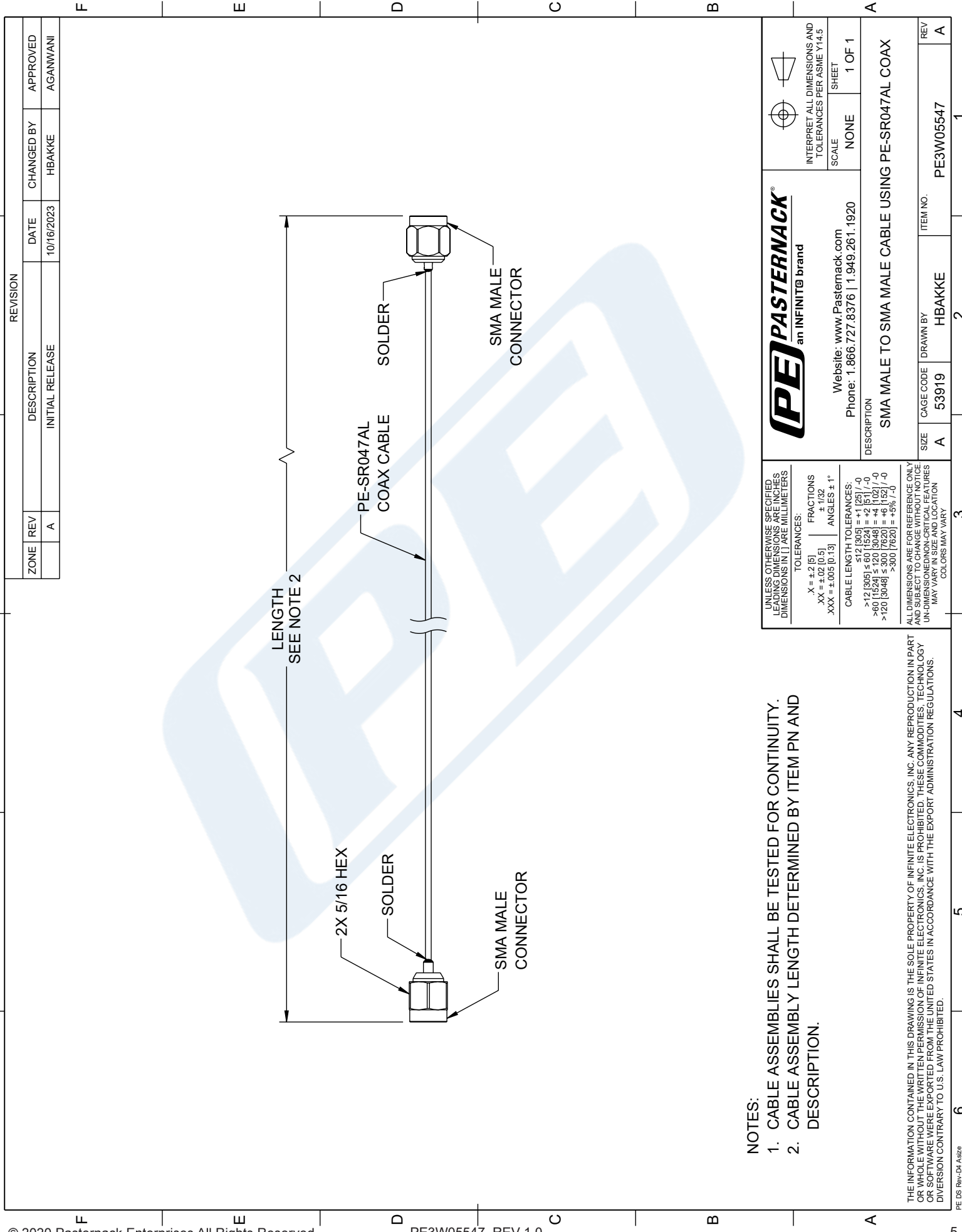
Example: PE3W05547-12 = 12 inches long cable
PE3W05547-100cm = 100 cm long cable

SMA Male to SMA Male Cable Using PE-SR047AL 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: [SMA Male to SMA Male Cable Using PE-SR047AL Coax PE3W05547](https://www.pasternack.com/sma-male-sma-male-pe-sr047al-cable-assembly-pe3w05547-p.aspx)

URL: <https://www.pasternack.com/sma-male-sma-male-pe-sr047al-cable-assembly-pe3w05547-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.





NOTES:

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

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ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/16/2023	HBAKKE	AGANWANI

 an INFINITI® brand					
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE NONE		SHEET 1 OF 1	
DESCRIPTION SMA MALE TO SMA MALE CABLE USING PE-SR047AL COAX		SIZE A		ITEM NO. PE3W05547	
CAGE CODE 53919		DRAWN BY HBAKKE		REV A	

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

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

CABLE LENGTH TOLERANCES:
≤ 12 [305] = ±.125 [-0
≤ 60 [1524] = ±.25 [-0
≤ 120 [3048] = ±.5 [-0
≤ 300 [7620] = ±1.0 [-0
≤ 600 [15240] = ±2.0 [-0
≤ 1200 [30480] = ±4.0 [-0
≤ 3000 [76200] = ±10.0 [-0
≤ 6000 [152400] = ±20.0 [-0
≤ 12000 [304800] = ±40.0 [-0
≤ 30000 [762000] = ±80.0 [-0
≤ 60000 [1524000] = ±160.0 [-0
≤ 120000 [3048000] = ±320.0 [-0
≤ 300000 [7620000] = ±800.0 [-0
≤ 600000 [15240000] = ±1600.0 [-0
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