



## SMA Female to SMA Female Cable Using PE-P047 Coax

### TECHNICAL DATA SHEET

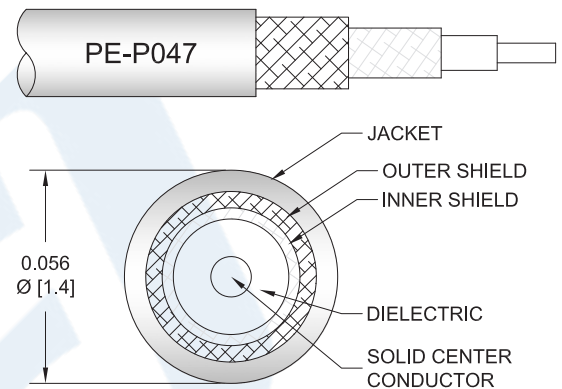
PE3C3144

#### Configuration

- Connector 1: SMA Female
- Connector 2: SMA Female
- Cable Type: PE-P047
- Coax Flex Type: Flexible

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C3144 SMA female to SMA female cable using PE-P047 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a female to female gender configuration with 50 ohm flexible PE-P047 coax. The PE3C3144 SMA female to SMA female cable assembly operates to 18 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 dB.

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 Female to SMA Female Cable Using PE-P047 Coax PE3C3144](#)



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#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	1000	2000	4500	9000	18000	
PE3C3144	Custom Lengths Available	Insertion Loss (Typ.)	0.34	0.48	0.746	1.102	1.653	dB/ft	
			1.1	1.59	2.45	3.62	5.43	dB/m	
PE3C3144-6	6 inch	Insertion Loss (Typ.)	0.37	0.45	0.58	0.76	1.03	dB	0.015
PE3C3144-12	12 inch	Insertion Loss (Typ.)	0.54	0.69	0.95	1.31	1.86	dB	0.016
PE3C3144-24	24 inch	Insertion Loss (Typ.)	0.87	1.17	1.7	2.41	3.51	dB	0.019
PE3C3144-36	36 inch	Insertion Loss (Typ.)	1.21	1.66	2.44	3.51	5.16	dB	0.022
PE3C3144-48	48 inch	Insertion Loss (Typ.)	1.54	2.14	3.19	4.61	6.82	dB	0.025

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:	0.016 pounds
Additional Weight per Inch:	0.00025 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.016 lbs [7.26 g]

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#### Cable

Cable Type	PE-P047
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	FEP
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.056 in [1.42 mm]
One Time Minimum Bend Radius	0.2 in [5.08 mm]
Repeated Minimum Bend Radius	0.4 in [10.16 mm]

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Female Threaded	SMA Female Threaded
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Body Plating Specification	MIL-G-45204	MIL-G-45204

#### Environmental Specifications

##### Temperature

Operating Range -65 to +165 deg C

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

#### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female to SMA Female Cable Using PE-P047 Coax PE3C3144](#)



## SMA Female to SMA Female Cable Using PE-P047 Coax

### TECHNICAL DATA SHEET

**PE3C3144**

#### How to Order

Part Number Configuration:

**PE3C3144**

- **xx**

**uu**

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

Example: PE3C3144-12 = 12 inches long cable  
PE3C3144-100cm = 100 cm long cable

SMA Female to SMA Female Cable Using PE-P047 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 Female to SMA Female Cable Using PE-P047 Coax PE3C3144](#)

URL: <https://www.pasternack.com/sma-female-to-sma-female-cable-using-pe-p047-pe3c3144-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.

# PE3C3144 CAD Drawing

SMA Female to SMA Female Cable Using PE-P047 Coax

F E D C B A

1

2

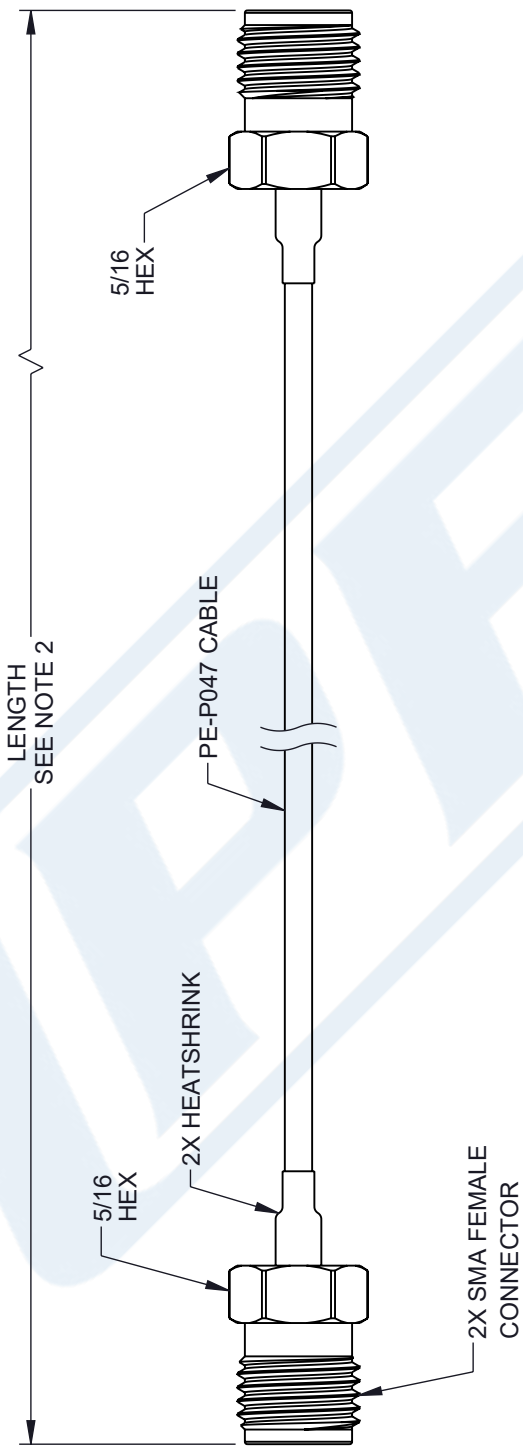
3

4

5

6

REVISION		CHANGED BY	APPROVED BY
ZONE	REV.	DESCRIPTION	DATE
	A	INITIAL RELEASE	11/16/2023
			BPUCHASKI
			AGANWANI



**NOTES:**

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

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UNLESS OTHERWISE SPECIFIED, LEAD DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.	
TOLERANCES:	FRACTIONS
.X = ±.2 [5]	±.1/32
.XX = ±.02 [0.5]	±.005 [0.13]
.XXX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305]	±.1 [25] / -0
5/16 [8.0]	±.01 [0.25] / -0
>60 [1524]	±.120 [3048] = +4 [102] / -0
>120 [3048]	±.300 [7620] = +6 [152] / -0
>300 [7620]	±.750 [19050] = +15 [381] / -0

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

Website: [www.Pasternack.com](http://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

DESCRIPTION: SMA FEMALE TO SMA FEMALE CABLE USING PE-P047 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3C3144	A

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