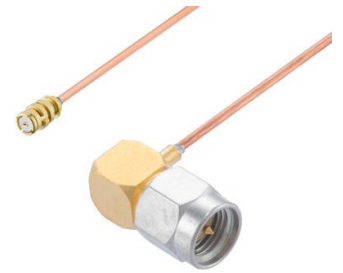


## SMA Male Right Angle to SMP Female Cable Using PE-047SR Coax



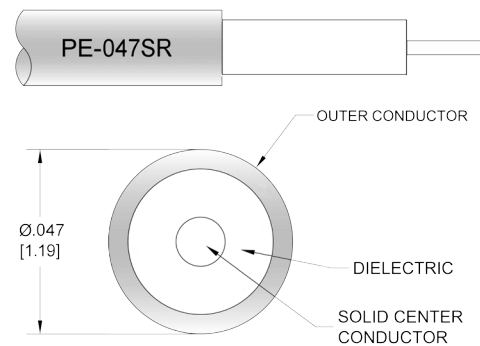
### PE3W16649

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMP Female
- Cable Type: PE-047SR
- Coax Cable Group: 18
- Coax Flex Type: Semi-Rigid

#### Features

- Max Frequency 10 GHz



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W16649 SMA male right angle to SMP female cable using PE-047SR 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 SMP cable assembly has a male to female gender configuration with 50 ohm semi-rigid PE-047SR coax. The PE3W16649 SMA male to SMP female cable assembly operates to 10 GHz. The right angle SMA interface on the PE-047SR cable allows for easier connections in tight spaces.

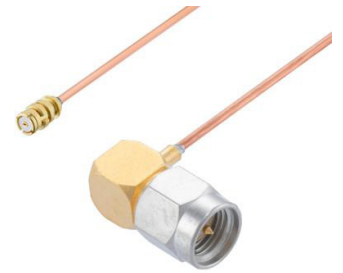
Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector 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		10	GHz
VSWR			1.4:1	

#### Specifications by Frequency

SMA Male Right Angle to SMP Female  
Cable Using PE-047SR Coax



**PE3W16649**

Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	1000	2500	5000	10000	
PE3W16649	Custom Lengths Available	Insertion Loss (Typ.)	0.4	0.55	0.8	1.3	dB/ft	
			1.32	1.81	2.63	4.27	dB/m	
PE3W16649-3	3 inch	Insertion Loss (Typ.)	0.4	0.44	0.5	0.63	dB	0.02
PE3W16649-6	6 inch	Insertion Loss (Typ.)	0.5	0.58	0.7	0.95	dB	0.021
PE3W16649-12	12 inch	Insertion Loss (Typ.)	0.7	0.85	1.1	1.6	dB	0.023
PE3W16649-18	18 inch	Insertion Loss (Typ.)	0.9	1.13	1.5	2.25	dB	0.026
PE3W16649-60	60 inch	Insertion Loss (Typ.)	2.3	3.05	4.3	6.8	dB	0.04

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: 0.2 dB  
 Loss due to Connector 2: 0.1 dB  
 Base Weight: 0.023 pounds  
 Additional Weight per Inch: 0.00034 pounds

**Mechanical Specifications**

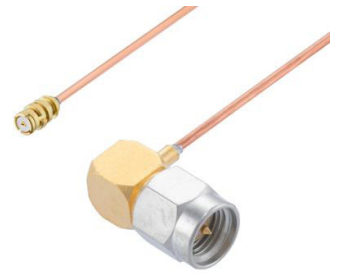
**Cable Assembly**

Width/Diameter: 0.5 in [12.7 mm]  
 Weight: 0.023 lbs [10.43 g]

**Cable**

Cable Type: PE-047SR  
 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 1 Material and Plating: Copper  
 Repeated Minimum Bend Radius: 0.05 in [1.27 mm]

## SMA Male Right Angle to SMP Female Cable Using PE-047SR Coax



### PE3W16649

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMP Female
Specification		DESC 94008
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204, Class 1	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Stainless Steel, Gold	Beryllium Copper, Gold
Body Plating Specification	MIL-G-45204, Class 0	MIL-G-45204
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	QQ-N-290, Class 1, Grade G	
Hex Size	5/16 in.	
Torque	5 in-lbs 0.57 Nm	

#### Environmental Specifications

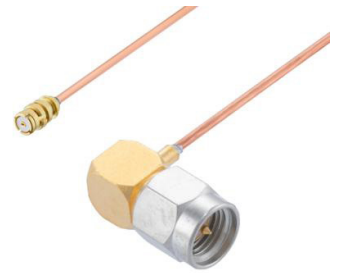
Operating Range Temperature -55 to +100 deg C

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

#### Plotted and Other Data

Notes:

## SMA Male Right Angle to SMP Female Cable Using PE-047SR Coax



### PE3W16649

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W16649**

- **xx**

**uu**

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W16649-12 = 12 inches long cable  
PE3W16649-100cm = 100 cm long cable

SMA Male Right Angle to SMP Female Cable Using PE-047SR 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.

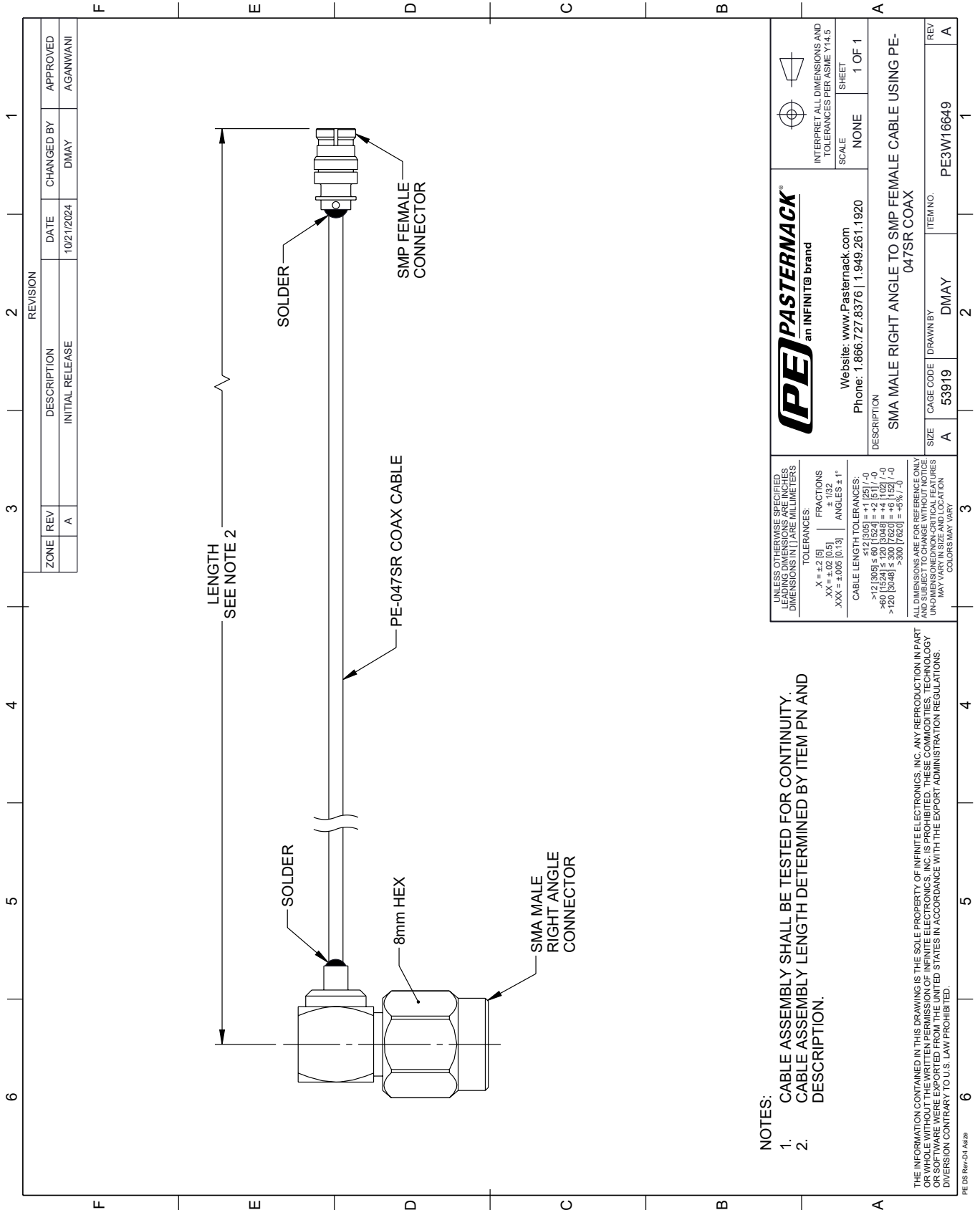
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle to SMP Female Cable Using PE-047SR Coax PE3W16649](#)

URL: <https://www.pasternack.com/sma-male-right-angle-to-smp-female-cable-using-pe-047sr-pe3w16649-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.

# PE3W16649 CAD Drawing

SMA Male Right Angle to SMP Female Cable Using PE-047SR Coax



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

**PE PASTERNAK**  
an INFINITI® brand

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 MALE RIGHT ANGLE TO SMP FEMALE CABLE USING PE-047SR COAX

SIZE	A	CAGE CODE	53919	DRAWN BY	DMAY	ITEM NO.	PE3W16649	REV	A
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**NOTES:**

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

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] = ±.1 [25] / -0  
 >120 [3048] ≤ 300 [7620] = ±.1 [25] / -0  
 >300 [7620] = ±.1 [25] / -0

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

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PE DS Rev-04 Add2