

## SMA Male Right Angle to SMA Male Right Angle Cable Using PE-SR405FL Coax with 180 Deg. Clock



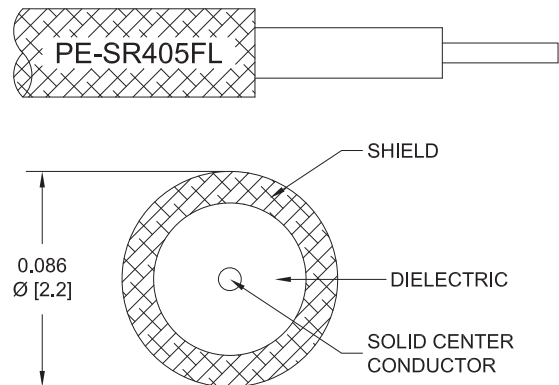
### PE3646/PH180

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: PE-SR405FL
- Coax Flex Type: Formable

#### Features

- Max Frequency 10 GHz
- 69.5% Phase Velocity



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3646/PH180 SMA male right angle to SMA male right angle cable using PE-SR405FL coax is part of our full line of RF components available for same-day shipping. Pasternack's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm formable PE-SR405FL coax. The PE3646/PH180 SMA male to SMA male cable assembly operates to 10 GHz. The right angle SMA interfaces on the PE-SR405FL 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		10	
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]

#### Specifications by Frequency

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**PE3646/PH180**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		500	1000	2500	5000	
PE3646/PH180	Custom Lengths Available	Insertion Loss (Typ.)	0.15	0.22	0.34	0.54	0.81	dB/ft	
			0.5	0.73	1.12	1.78	2.66	dB/m	
PE3646/PH180-6	6 inch	Insertion Loss (Typ.)	0.48	0.51	0.57	0.67	0.81	dB	0.036
PE3646/PH180-9	9 inch	Insertion Loss (Typ.)	0.52	0.57	0.66	0.81	1.01	dB	0.039
PE3646/PH180-12	12 inch	Insertion Loss (Typ.)	0.55	0.62	0.74	0.94	1.21	dB	0.041
PE3646/PH180-24	24 inch	Insertion Loss (Typ.)	0.7	0.84	1.08	1.48	2.02	dB	0.053
PE3646/PH180-36	36 inch	Insertion Loss (Typ.)	0.85	1.06	1.42	2.02	2.83	dB	0.064

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: 0.2 dB  
 Base Weight: 0.041 pounds  
 Additional Weight per Inch: 0.00092 pounds

**Mechanical Specifications**

**Cable Assembly**

Weight 0.041 lbs [18.6 g]

**Cable**

Cable Type PE-SR405FL  
 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, Tin  
 Repeated Minimum Bend Radius 0.78 in [19.81 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Stainless Steel, Gold	Stainless Steel, Gold
Body Plating Specification	30 µin minimum	30 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	5/16 inch
Torque	3 in-lbs 0.34 Nm	3 in-lbs 0.34 Nm

**Environmental Specifications**

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

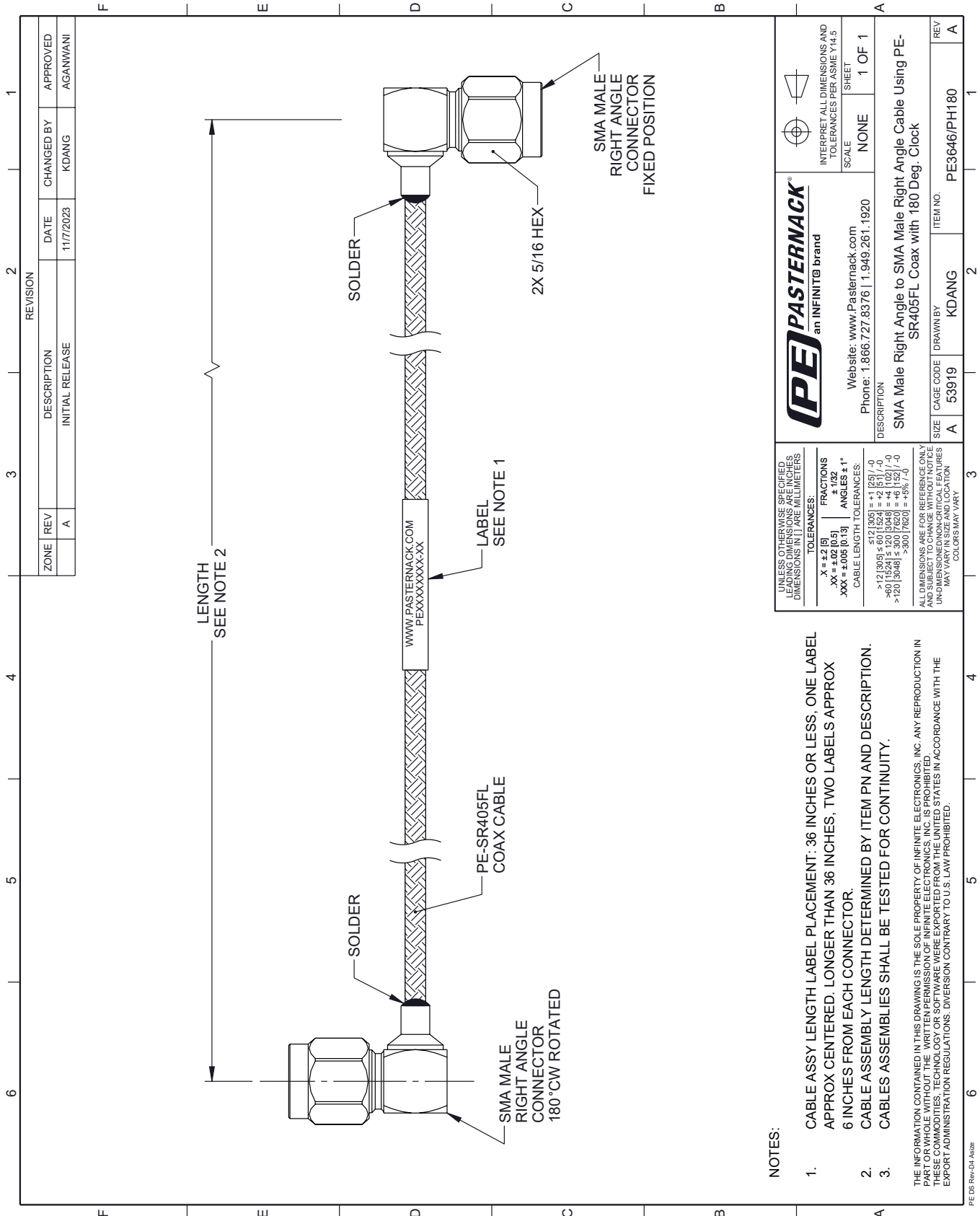
**Plotted and Other Data**

Notes:



# PE3646/PH180 CAD Drawing

SMA Male Right Angle to SMA Male Right Angle Cable Using PE-SR405FL Coax with 180 Deg. Clock



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV			
	A	11/7/2023	KDANG	AGANWANI
DESCRIPTION				
INITIAL RELEASE				

**PE PASTERNAK**  
an INFINITB brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
SMA Male Right Angle to SMA Male Right Angle Cable Using PE-SR405FL Coax with 180 Deg. Clock

SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	53919	KDANG	PE3646/PH180

REV A

**NOTES:**

- CABLE ASSY LENGTH LABEL PLACEMENT: .36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN .36 INCHES, TWO LABELS APPROX .6 INCHES FROM EACH CONNECTOR.
- CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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PE DS Rev-D4-A320