

## SMA Female Bulkhead to SMA Male Cable Using PE-SR405AL Coax with HeatShrink



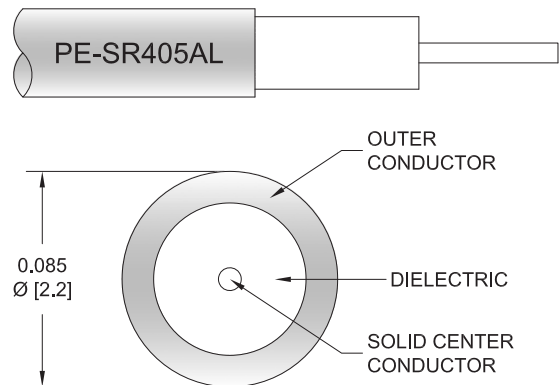
### PE3W16309/HS

#### Configuration

- Connector 1: SMA Female Bulkhead
- Connector 2: SMA Male
- Cable Type: PE-SR405AL
- Coax Flex Type: Semi-Rigid

#### Features

- Max Frequency 18 GHz



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3W16309/HS SMA female bulkhead to SMA male cable using PE-SR405AL 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 female to male gender configuration with 50 ohm semi-rigid PE-SR405AL coax. The PE3W16309/HS SMA female to SMA male cable assembly operates to 18 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications.

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		18	GHz
VSWR			1.4:1	

#### Specifications by Frequency

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### PE3W16309/HS

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		1000	2000	4500	9000	
PE3W16309/HS	Custom Lengths Available	Insertion Loss (Typ.)	0.23	0.294	0.456	0.746	1.21	dB/ft	
			0.76	0.97	1.5	2.45	3.97	dB/m	
PE3W16309/HS-6	6 In	Insertion Loss (Typ.)	0.82	0.85	0.93	1.08	1.31	dB	0.026
PE3W16309/HS-12	12 In	Insertion Loss (Typ.)	0.93	1	1.16	1.45	1.91	dB	0.033
PE3W16309/HS-18	18 In	Insertion Loss (Typ.)	1.05	1.15	1.39	1.82	2.52	dB	0.041
PE3W16309/HS-24	24 In	Insertion Loss (Typ.)	1.16	1.29	1.62	2.2	3.12	dB	0.048
PE3W16309/HS-36	36 In	Insertion Loss (Typ.)	1.39	1.59	2.07	2.94	4.33	dB	0.062

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:	0.6 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.033 pounds
Additional Weight per Inch:	0.00117 pounds

### Mechanical Specifications

#### Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.019 lbs [8.62 g]

#### Cable

Cable Type	PE-SR405AL
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	Tinned Aluminum
One Time Minimum Bend Radius	0.05 in [1.27 mm]

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### PE3W16309/HS

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	SMA Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Brass, Gold
Contact Plating Specification		50μ in. minimum
Dielectric Type	PTFE	Teflon
Body Material and Plating	Brass, Gold over Nickel	Brass, Gold
Body Plating Specification		3μ in. minimum
Coupling Nut Material and Plating		Brass, Gold
Coupling Nut Plating Specification		3μ in. minimum
Hex Size		5/16 Inch
Torque		3 in-lbs 0.34 Nm

#### Environmental Specifications

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

#### Plotted and Other Data

Notes:

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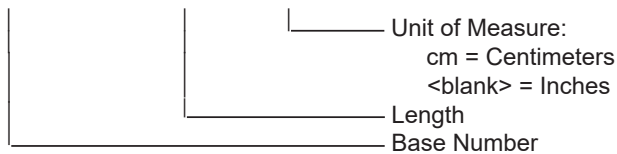
### PE3W16309/HS

#### Typical Performance Data

#### How to Order

Part Number Configuration:

**PE3W16309/HS - xx uu**



Example: PE3W16309/HS-12 = 12 inches long cable  
PE3W16309/HS-100cm = 100 cm long cable

SMA Female Bulkhead to SMA Male Cable Using PE-SR405AL Coax with HeatShrink 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.

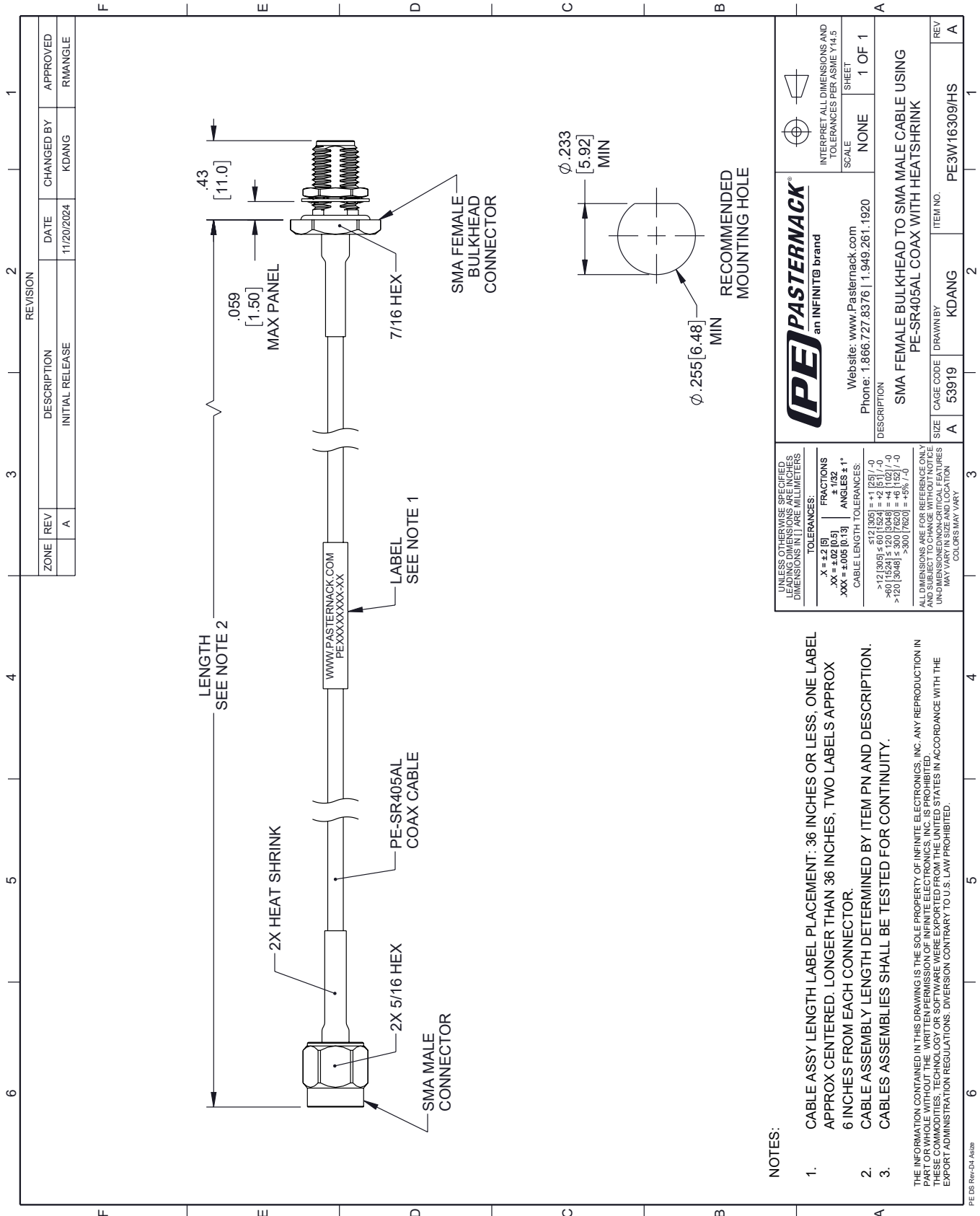
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead to SMA Male Cable Using PE-SR405AL Coax with HeatShrink PE3W16309/HS](#)

URL: <https://www.pasternack.com/sma-female-bulkhead-to-sma-male-cable-using-pe-sr405al-with-heatshrink-pe3w16309-hs-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.

# PE3W16309/HS CAD Drawing

SMA Female Bulkhead to SMA Male Cable Using PE-SR405AL Coax with HeatShrink



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	11/20/2024	KDANG	RMANGLE

**PE PASTERNAK**  
an INFINITB 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 FEMALE BULKHEAD TO SMA MALE CABLE USING PE-SR405AL COAX WITH HEATSHRINK

ITEM NO.: PE3W16309/HS

CAGE CODE: 53919 DRAWN BY: KDANG

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

TOLERANCES:  
 .X = ±.2 [5]  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]

FRACTIONS: ± 1/32  
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 <12 [305] ± .60 [1524] = ±.2 [5.1] / -0  
 >12 [305] ± .60 [1524] = ±.2 [5.1] / -0  
 >40 [1024] ± .120 [3048] = ±.4 [1027] / -0  
 >120 [3048] ± .300 [7620] = ±.93 [23.7] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS. DIMENSIONS NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

- 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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