

## SMA Female Bulkhead to SMP Female Right Angle Cable Using PE-P086 Coax with HeatShrink and 90 Deg. Clock



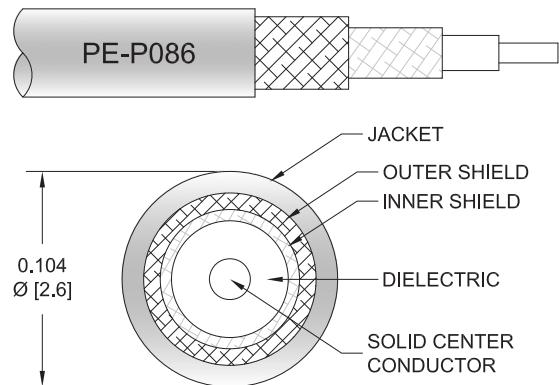
### PE3C5193/SP1

#### Configuration

- Connector 1: SMA Female Bulkhead
- Connector 2: SMP Female Right Angle
- Cable Type: PE-P086
- Coax Flex Type: Flexible

#### Features

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C5193/SP1 SMA female bulkhead to SMP female right angle cable using PE-P086 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 SMP cable assembly has a female to female gender configuration with 50 ohm flexible PE-P086 coax. The PE3C5193/SP1 SMA female to SMP female cable assembly operates to 18 GHz. The right angle SMP interface on the PE-P086 cable allows for easier connections in tight spaces. 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. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 110 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.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	110			dB
Capacitance		29.4 [96.46]		pF/ft [pF/m]

#### Specifications by Frequency

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**PE3C5193/SP1**

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency		1000	2000	4500	9000	
PE3C5193/SP1	Custom Lengths Available	Insertion Loss (Typ.)	0.211	0.305	0.47	0.695	1.046	dB/ft	
			0.7	1.01	1.55	2.29	3.44	dB/m	
PE3C5193/SP1-6	6 In	Insertion Loss (Typ.)	0.91	0.96	1.04	1.15	1.33	dB	0.045
PE3C5193/SP1-12	12 In	Insertion Loss (Typ.)	1.02	1.11	1.27	1.5	1.85	dB	0.051
PE3C5193/SP1-24	24 In	Insertion Loss (Typ.)	1.23	1.41	1.74	2.19	2.9	dB	0.065
PE3C5193/SP1-36	36 In	Insertion Loss (Typ.)	1.44	1.72	2.21	2.89	3.94	dB	0.078
PE3C5193/SP1-48	48 In	Insertion Loss (Typ.)	1.65	2.02	2.68	3.58	4.99	dB	0.091

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: 0.2 dB  
 Base Weight: 0.051 pounds  
 Additional Weight per Inch: 0.00109 pounds

**Mechanical Specifications**

**Cable Assembly**

Weight lbs [0 g]

**Cable**

Cable Type PE-P086  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper Clad Steel, Silver  
 Dielectric Type PTFE  
 Number of Shields 2  
 Shield Layer 1 Silver Plated Copper Tape  
 Shield Layer 2 Silver Plated Copper Braid  
 Jacket Material FEP, Blue  
 Jacket Diameter 0.104 in [2.64 mm]  
 Repeated Minimum Bend Radius 0.5 in [12.7 mm]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Female Bulkhead	SMP Female Right Angle
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold
Contact Plating Specification		MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold over Nickel	Beryllium Copper, Gold
Body Plating Specification		MIL-G-45204

**Environmental Specifications**

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

**Plotted and Other Data**

Notes:

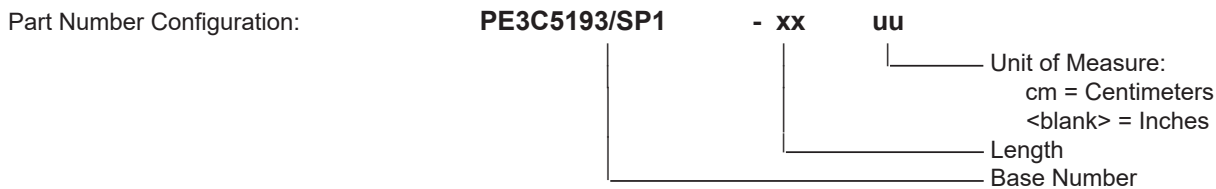
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**PE3C5193/SP1**

**Typical Performance Data**

**How to Order**



Example:    PE3C5193/SP1-12 = 12 inches long cable  
              PE3C5193/SP1-100cm = 100 cm long cable

SMA Female Bulkhead to SMP Female Right Angle Cable Using PE-P086 Coax with HeatShrink and 90 Deg. Clock 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.

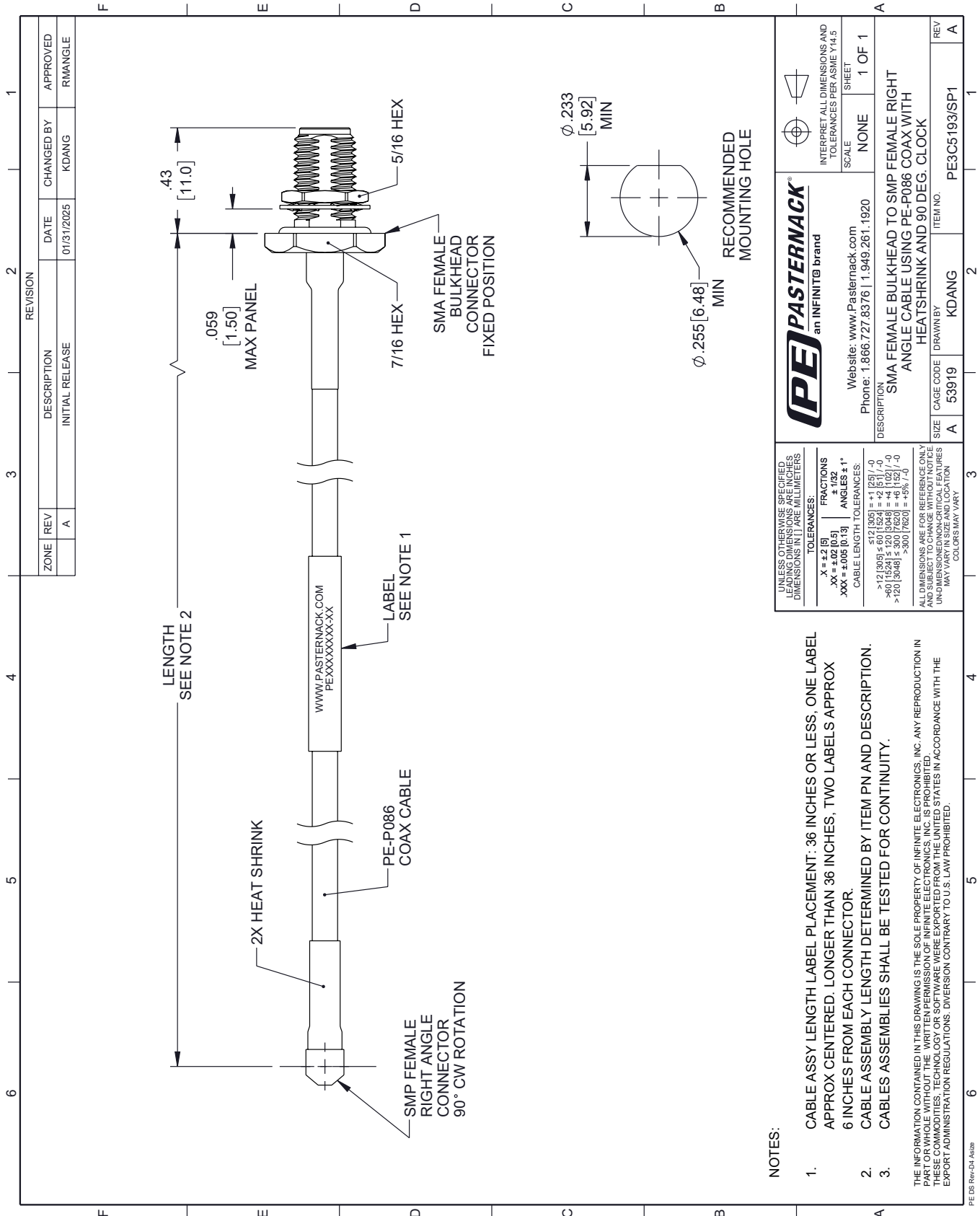
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Female Bulkhead to SMP Female Right Angle Cable Using PE-P086 Coax with HeatShrink and 90 Deg. Clock PE3C5193/SP1](https://www.pasternack.com/sma-female-bulkhead-to-smp-female-cable-using-pe-p086-with-heatshrink-and-90-deg.-clock-pe3c5193-sp1-p.aspx)

URL: <https://www.pasternack.com/sma-female-bulkhead-to-smp-female-cable-using-pe-p086-with-heatshrink-and-90-deg.-clock-pe3c5193-sp1-p.aspx>

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# PE3C5193/SP1 CAD Drawing

SMA Female Bulkhead to SMP Female Right Angle Cable Using PE-P086 Coax with HeatShrink and 90 Deg. Clock



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	01/31/2025	KDANG	RMANGLE

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an INFINITE 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 SMP FEMALE RIGHT ANGLE CABLE USING PE-P086 COAX WITH HEATSHRINK AND 90 DEG. CLOCK

ITEM NO. PE3C5193/SP1

CAGE CODE 53919  
DRAWN BY KDANG

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

TOLERANCES:  
 .X = ±.2 [5] ±.132  
 .XX = ±.02 [0.5]  
 .XXX = ±.005 [0.13]  
 ANGLES ± 1°  
 CABLE LENGTH TOLERANCES:  
 <12 [305] ±.60 [1524] = ±.2 [51] / -0  
 >12 [305] ±.60 [1524] = ±.2 [51] / -0  
 >40 [1024] ±.120 [3048] = ±.4 [1027] / -0  
 >120 [3048] ±.300 [7620] = ±.93 [234]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED 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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