

SMA Male to Smooth Bore SMP Male Bulkhead Cable Using PE-P086 Coax



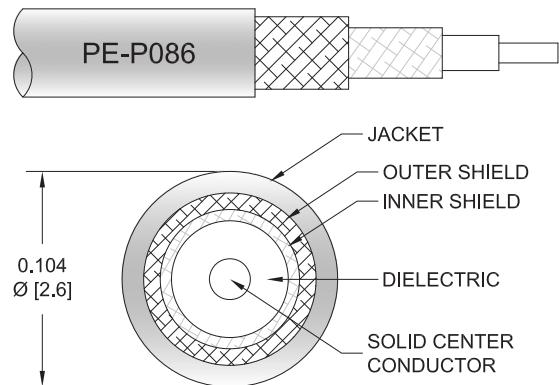
PE3C10174

Configuration

- Connector 1: SMA Male
- Connector 2: Smooth Bore SMP Male Bulkhead
- 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 PE3C10174 SMA male to SMP male smooth bore bulkhead 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 male to male gender configuration with 50 ohm flexible PE-P086 coax. The PE3C10174 SMA male to SMP male cable assembly operates to 18 GHz. Our RF cable assembly with SMP 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

SMA Male to Smooth Bore SMP Male
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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	1000	2000	4500	9000	18000	
PE3C10174	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	
PE3C10174-6	6 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.55	0.73	dB	0.047
PE3C10174-12	12 inch	Insertion Loss (Typ.)	0.42	0.51	0.67	0.9	1.25	dB	0.053
PE3C10174-24	24 inch	Insertion Loss (Typ.)	0.63	0.81	1.14	1.59	2.3	dB	0.067
PE3C10174-36	36 inch	Insertion Loss (Typ.)	0.84	1.12	1.61	2.29	3.34	dB	0.08
PE3C10174-48	48 inch	Insertion Loss (Typ.)	1.05	1.42	2.08	2.98	4.39	dB	0.093

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: 0.053 pounds
 Additional Weight per Inch: 0.00109 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.053 lbs [24.04 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 Male	SMP Male Bulkhead
Specification		MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Connection Method		Smooth Bore
Contact Material and Plating	Brass, 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
Coupling Nut Material and Plating	Passivated Stainless Steel	
Hex Size	5/16 inch	
Torque	8 in-lbs 0.9 Nm	

Environmental Specifications

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

Plotted and Other Data

Notes:

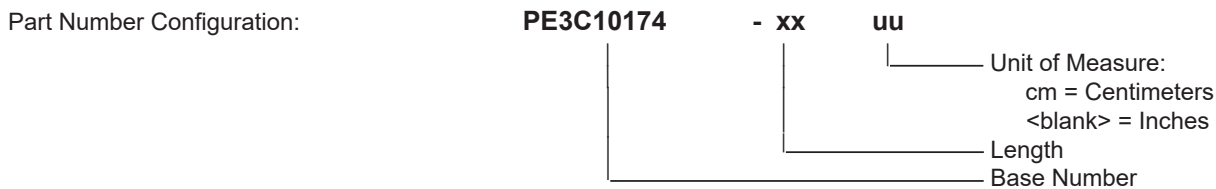
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PE3C10174

Typical Performance Data

How to Order



Example: PE3C10174-12 = 12 inches long cable
 PE3C10174-100cm = 100 cm long cable

SMA Male to Smooth Bore SMP Male Bulkhead Cable Using PE-P086 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.

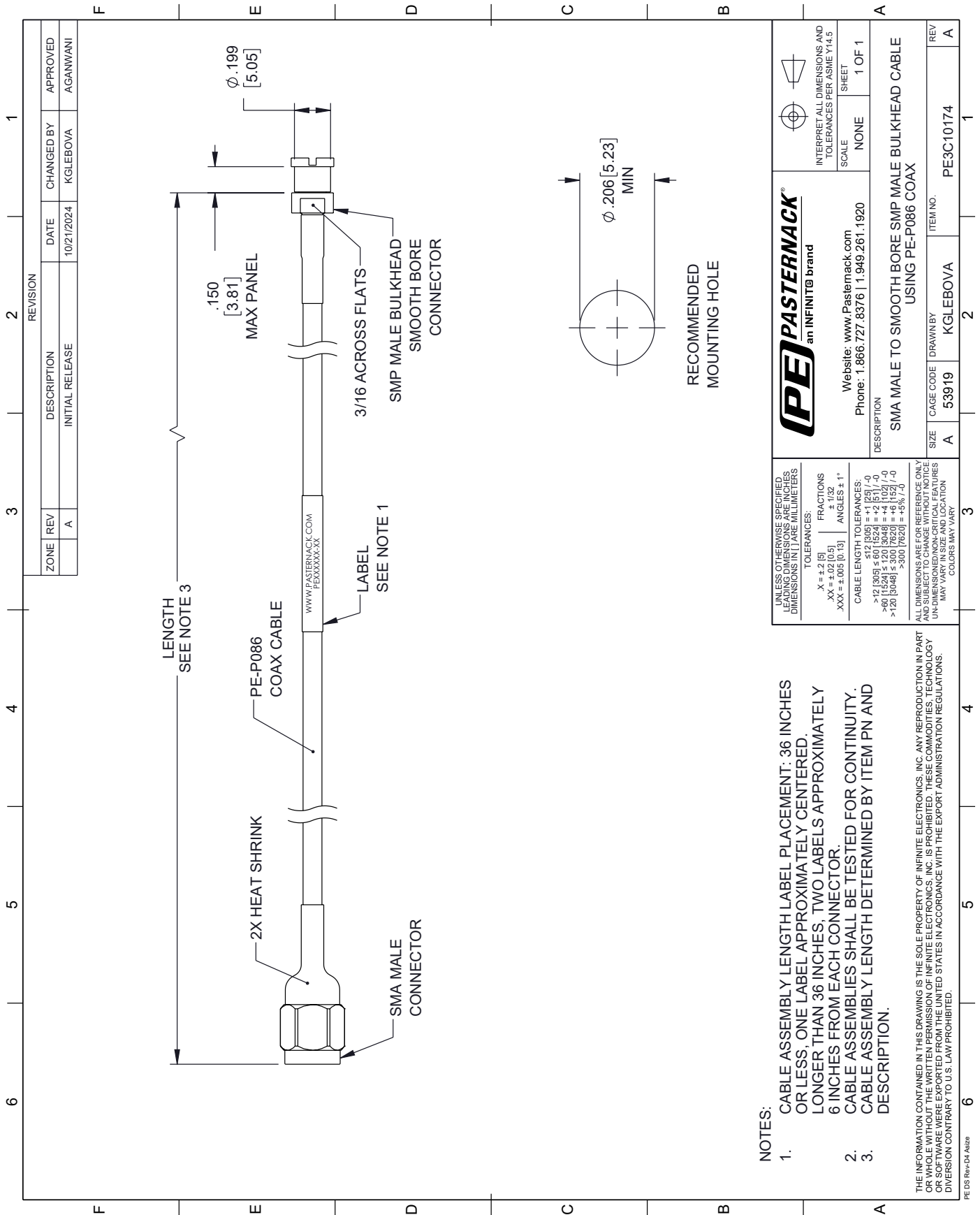
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to Smooth Bore SMP Male Bulkhead Cable Using PE-P086 Coax PE3C10174](#)

URL: <https://www.pasternack.com/sma-male-to-smooth-bore-smp-male-bulkhead-cable-using-pe-p086-pe3c10174-p.aspx>

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PE3C10174 CAD Drawing

SMA Male to Smooth Bore SMP Male Bulkhead Cable Using PE-P086 Coax




NOTES:

1. CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
3. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN PAREMILLIMETERS	
TOLERANCES:	
.X = ±.02 [0.5]	FRACTIONS ± 1/32
.XX = ±.005 [0.13]	ANGLES ± 1°
CABLE LENGTH TOLERANCES:	
>12 [305] ≤ 60 [1524] = +1 [25] / -0	
>60 [1524] ≤ 120 [3048] = +4 [102] / -0	
>120 [3048] ≤ 300 [7620] = +5 [127] / -0	
>300 [7620] = +5 [127] / -0	
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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1		DESCRIPTION: SMA MALE TO SMOOTH BORE SMP MALE BULKHEAD CABLE USING PE-P086 COAX SIZE: A CAGE CODE: 53919 DRAWN BY: KGLEBOVA ITEM NO.: PE3C10174