

SMP Female Right Angle to SMA Male Cable Using PE-P086 Coax

TECHNICAL DATA SHEET

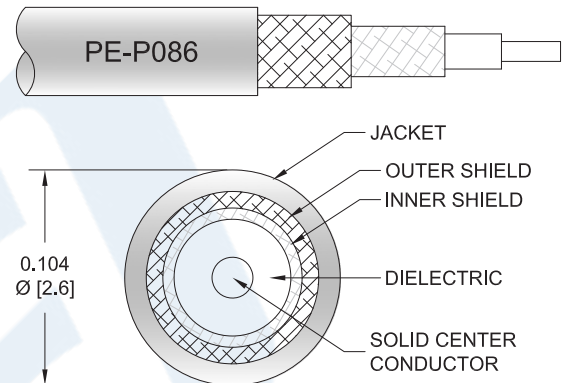
PE3C1603

Configuration

- Connector 1: SMP Female Right Angle
- Connector 2: SMA Male
- 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

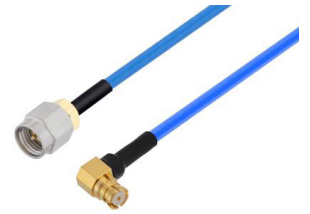
- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1603 SMP female right angle to SMA male 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 SMP to SMA cable assembly has a female to male gender configuration with 50 ohm flexible PE-P086 coax. The PE3C1603 SMP female to SMA male cable assembly operates to 18 GHz. The right angle SMP interface on the PE-P086 cable allows for easier connections in tight spaces. 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMP Female Right Angle to SMA Male Cable Using PE-P086 Coax PE3C1603](#)



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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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			1000	2000	4500	9000	18000	MHz	
PE3C1603	Custom Lengths Available	Insertion Loss (Typ.)	0.21	0.31	0.47	0.695	1.046	dB/ft	
			0.7	1.01	1.55	2.29	3.44	dB/m	
PE3C1603-6	6 inch	Insertion Loss (Typ.)	0.41	0.46	0.54	0.65	0.83	dB	0.045
PE3C1603-12	12 inch	Insertion Loss (Typ.)	0.52	0.61	0.77	1	1.35	dB	0.051
PE3C1603-24	24 inch	Insertion Loss (Typ.)	0.73	0.91	1.24	1.69	2.4	dB	0.065
PE3C1603-36	36 inch	Insertion Loss (Typ.)	0.94	1.22	1.71	2.39	3.44	dB	0.078
PE3C1603-48	48 inch	Insertion Loss (Typ.)	1.15	1.52	2.18	3.08	4.49	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.

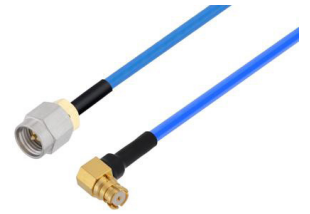
Loss due to Connector 1:	0.2 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.051 pounds
Additional Weight per Inch:	0.00109 pounds

Mechanical Specifications

Cable Assembly

Weight 0.051 lbs [23.13 g]

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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]

Connectors

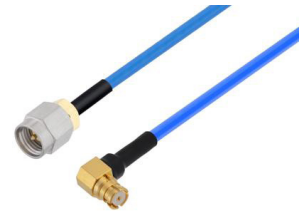
Description	Connector 1	Connector 2
Type	SMP Female Right Angle Push-On	SMA Male Threaded
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold over Nickel
Contact Plating Specification	MIL-G-45204	
Dielectric Type	PTFE	PTFE
Body Material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

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

Plotted and Other Data

Notes:

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TECHNICAL DATA SHEET

PE3C1603

How to Order

Part Number Configuration:

PE3C1603

- **xx**

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Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C1603-12 = 12 inches long cable
PE3C1603-100cm = 100 cm long cable

SMP Female Right Angle to SMA Male 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: [SMP Female Right Angle to SMA Male Cable Using PE-P086 Coax PE3C1603](#)

URL: <https://www.pasternack.com/smp-female-right-angle-to-sma-male-cable-using-pe-p086-pe3c1603-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

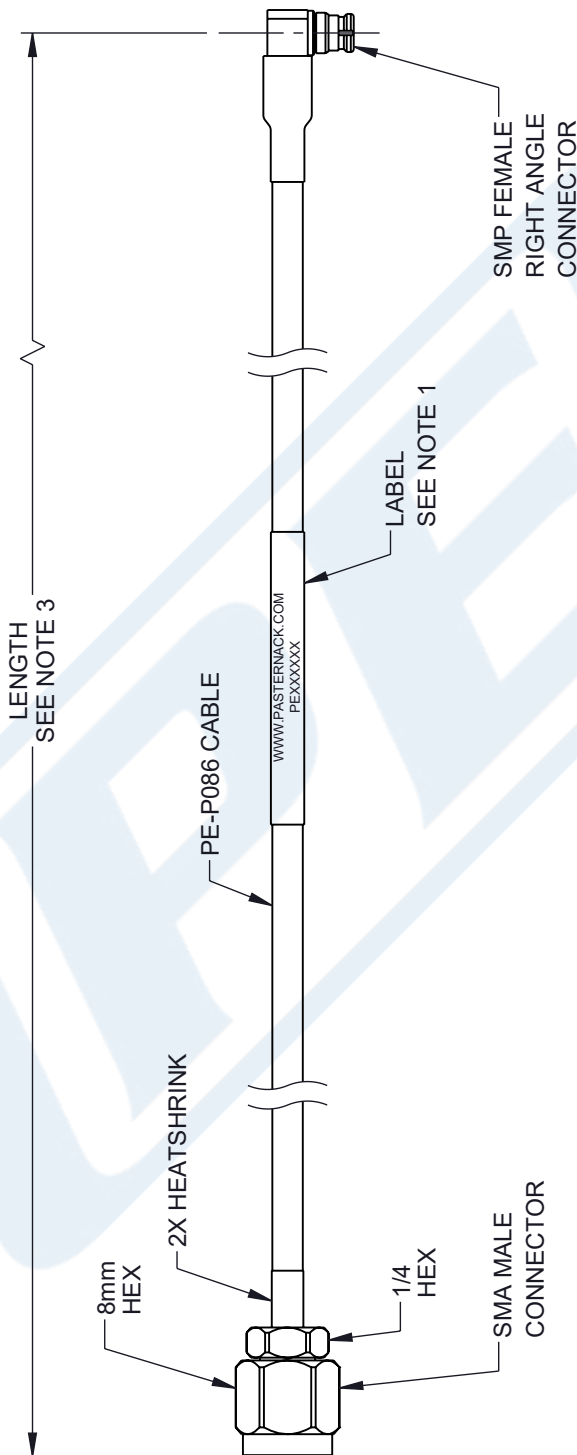
PE3C1603 CAD Drawing

SMP Female Right Angle to SMA Male Cable Using PE-P086 Coax

F E D C B A

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ZONE		REVISION		CHANGED BY		APPROVED BY	
A		DESCRIPTION	DATE	BPUCHASKI		AGANWANI	
		INITIAL RELEASE	11/16/2023				



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 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] = ±.1 [2.5] / -0 ≤ 120 [3048] = ±.4 [10.2] / -0 ≤ 300 [7620] = ±.6 [15.2] / -0 > 300 [7620] = ±.9% / -0	ALL DIMENSIONS ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.	

Website: 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 TO SMP FEMALE RIGHT ANGLE CABLE USING PE-P086 COAX

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3C1603	A