



SMP Female to SMP Female Cable Using PE-P086 Coax

TECHNICAL DATA SHEET

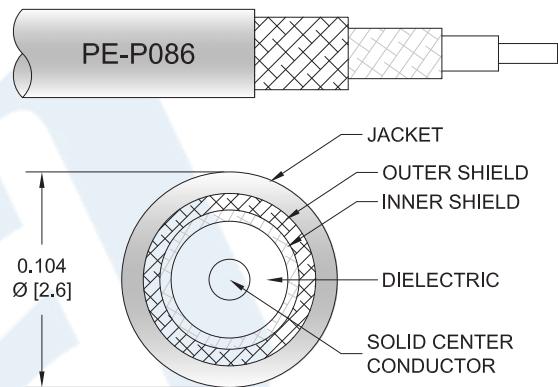
PE3C1002

Configuration

- Connector 1: SMP Female
- Connector 2: SMP Female
- 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 PE3C1002 SMP female to SMP female 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 SMP cable assembly has a female to female gender configuration with 50 ohm flexible PE-P086 coax. The PE3C1002 SMP female to SMP female cable assembly operates to 18 GHz. 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 to SMP Female Cable Using PE-P086 Coax PE3C1002](#)



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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)
		Frequency	1000	2000	4500	9000	18000		
PE3C1002	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	
PE3C1002-6	6 inch	Insertion Loss (Typ.)	0.31	0.36	0.44	0.55	0.73	dB	0.019
PE3C1002-12	12 inch	Insertion Loss (Typ.)	0.42	0.51	0.67	0.9	1.25	dB	0.025
PE3C1002-24	24 inch	Insertion Loss (Typ.)	0.63	0.81	1.14	1.59	2.3	dB	0.039
PE3C1002-36	36 inch	Insertion Loss (Typ.)	0.84	1.12	1.61	2.29	3.34	dB	0.052
PE3C1002-48	48 inch	Insertion Loss (Typ.)	1.05	1.42	2.08	2.98	4.39	dB	0.065

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:	0.025 pounds
Additional Weight per Inch:	0.00109 pounds

Mechanical Specifications

Cable Assembly

Weight	0.025 lbs [11.34 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 Push-On	SMP Female Push-On
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Plating Specification	MIL-G-45204	MIL-G-45204

Environmental Specifications

Temperature

Operating Range

-55 to +165 deg C

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

Plotted and Other Data

Notes:

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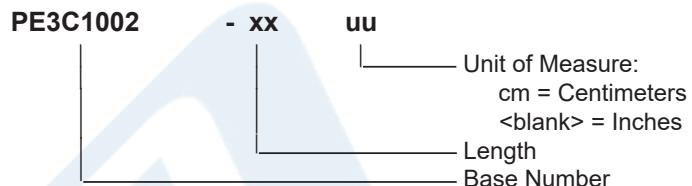
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How to Order

Part Number Configuration:



Example: PE3C1002-12 = 12 inches long cable
PE3C1002-100cm = 100 cm long cable

SMP Female to SMP Female 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.

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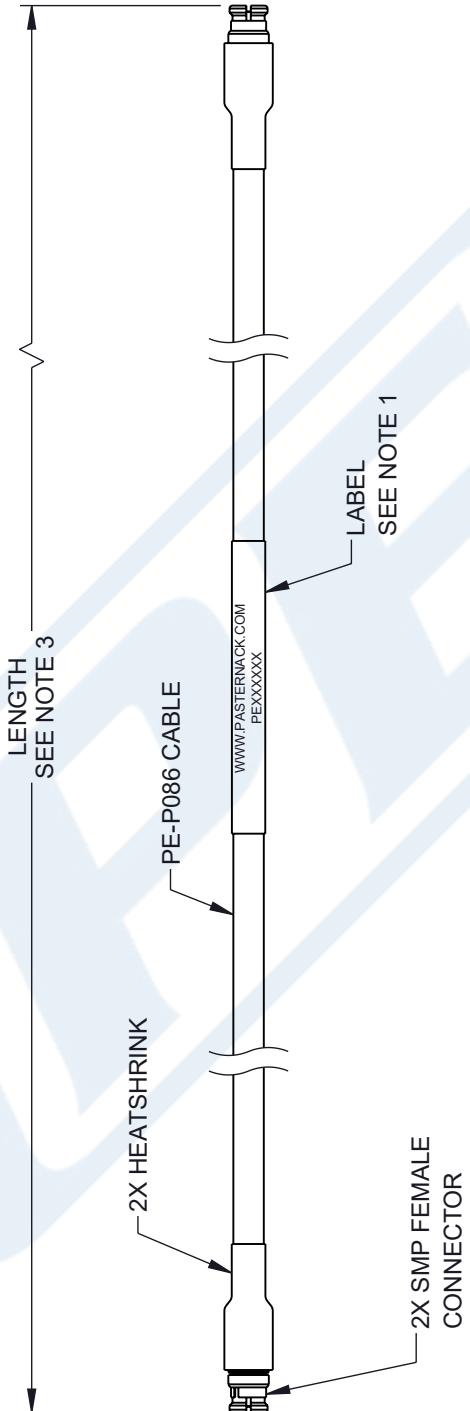
URL: <https://www.pasternack.com/smp-female-to-smp-female-cable-using-pe-p086-pe3c1002-p.aspx>

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PE3C1002 CAD Drawing

SMP Female to SMP Female Cable Using PE-P086 Coax

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



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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