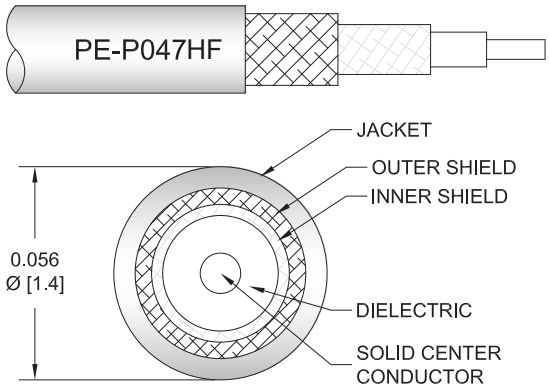
SMPS Female Right Angle to 1.85mm Male Cable Using PE-P047HF Coax



PE3C9963

Configuration

- Connector 1: SMPS Female Right Angle
- Connector 2: 1.85mm Male
- Cable Type: PE-P047HF
- Coax Flex Type: Flexible



Features

- Max Frequency 40 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- Scientific research
- High-reliability, high-density for aerospace & defense application
- Ground base station & communication systems, avionics, radar systems

Description

Pasternack's PE3C9963 SMPS female right angle to 1.85mm male cable using PE-P047HF 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 SMPS to 1.85mm cable assembly has a female to male gender configuration with 50 ohm flexible PE-P047HF coax. The PE3C9963 SMPS female to 1.85mm male cable assembly operates to 40 GHz. The right angle SMPS interface on the PE-P047HF cable allows for easier connections in tight spaces. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 90 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		40	GHz
VSWR			1.55:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	2500	5000	10000	20000	40000	MHz	
PE3C9963	Custom Lengths Available	Insertion Loss (Typ.)	0.55	0.8	1.17	1.78	2.77	dB/ft	
			1.81	2.63	3.84	5.84	9.09	dB/m	
PE3C9963-6	6 inch	Insertion Loss (Typ.)	0.53	0.76	1.1	1.61	2.4	dB	0.011
PE3C9963-12	12 inch	Insertion Loss (Typ.)	0.81	1.16	1.68	2.5	3.79	dB	0.013
PE3C9963-18	18 inch	Insertion Loss (Typ.)	1.08	1.56	2.27	3.39	5.17	dB	0.015

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:	0.12*SQRT(FGHz)	dB
Loss due to Connector 2:	0.04*SQRT(FGHz)	dB
Base Weight:	0.013	pounds
Additional Weight per Inch:	0.00033	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.0144 lbs [6.53 g]

Cable

Cable Type	PE-P047HF
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, 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	0.06 in [1.52 mm]
Repeated Minimum Bend Radius	0.1 in [2.54 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMPS Female Right Angle	1.85mm Male
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PEI
Outer Conductor Material and Plating	Beryllium Copper, Gold	
Outer Conductor Plating Specification	50 µin minimum	
Body Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Body Plating Specification	30 µin minimum	50 µin minimum
Coupling Nut Material and Plating		Passivated Stainless Steel
Coupling Nut Plating Specification		ASTM-A582

Environmental Specifications

Operating Range Temperature	-55 to +150 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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PE3C9963

Typical Performance Data

How to Order

Part Number Configuration: **PE3C9963 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C9963 — Base Number

Example: PE3C9963-12 = 12 inches long cable
PE3C9963-100cm = 100 cm long cable

SMPS Female Right Angle to 1.85mm Male Cable Using PE-P047HF 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: SMPS Female Right Angle to 1.85mm Male Cable Using PE-P047HF Coax PE3C9963

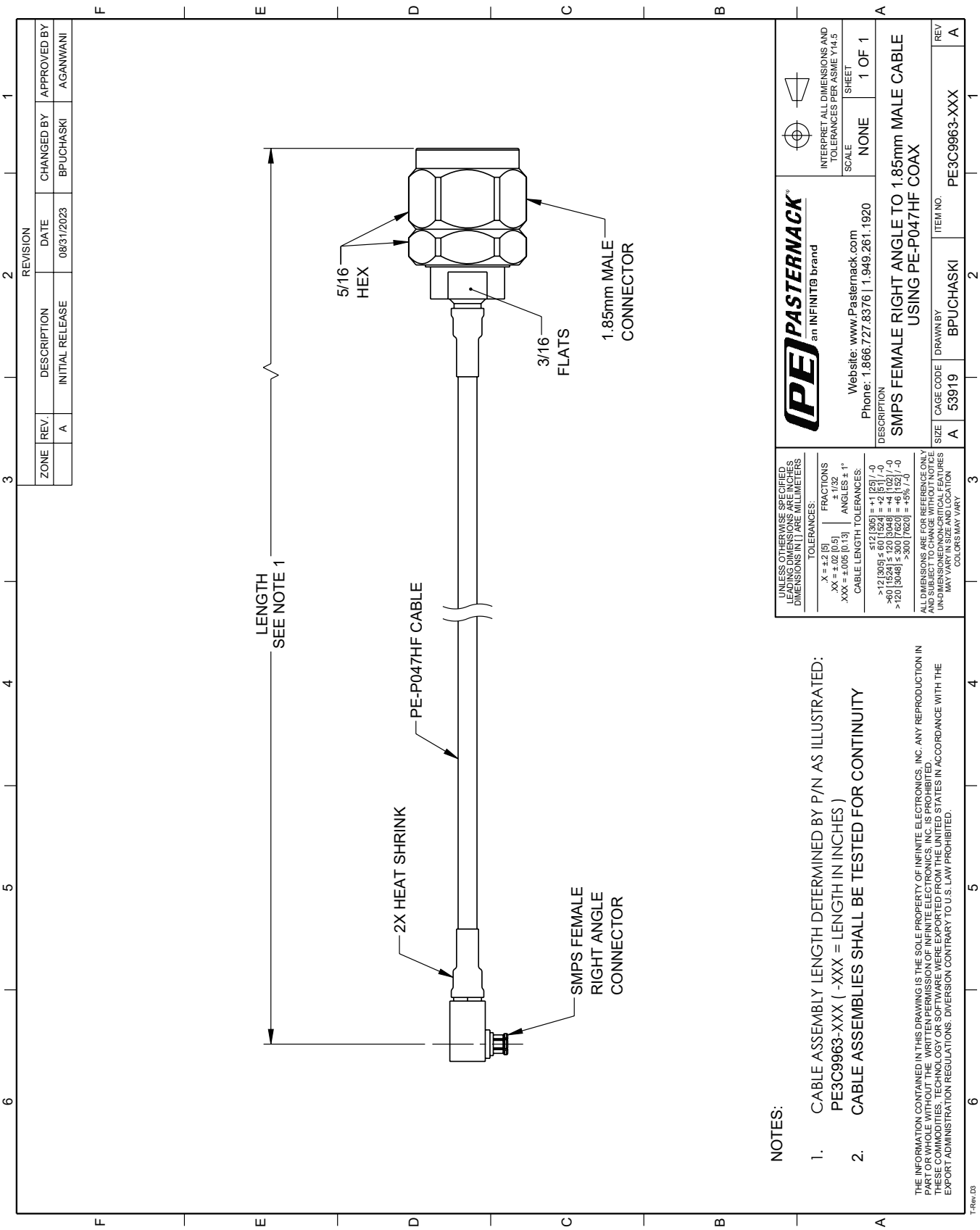
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PE3C9963 CAD Drawing

SMPS Female Right Angle to 1.85mm Male Cable Using PE-P047HF Coax



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