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Mini SMP Female Right Angle to Mini SMP Female Right Angle Cable Using PE-P047 Coax with 180 Deg. Clock

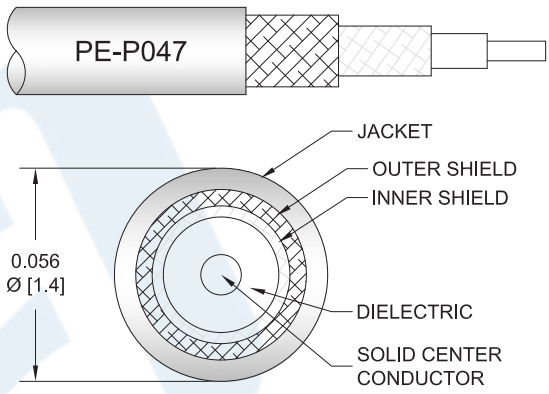
TECHNICAL DATA SHEET PE3C5004/PH180

Configuration

- Connector 1: Mini SMP Female Right Angle
- Connector 2: Mini SMP Female Right Angle
- Cable Type: PE-P047
- Coax Flex Type: Flexible

Features

- Max Frequency 12 GHz
- Shielding Effectivity > 90 dB
- 70% Phase Velocity
- Double Shielded
- FEP Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C5004/PH180 Mini SMP female right angle to Mini SMP female right angle cable using PE-P047 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 Mini SMP to Mini SMP cable assembly has a female to female gender configuration with 50 ohm flexible PE-P047 coax. The PE3C5004/PH180 Mini SMP female to Mini SMP female cable assembly operates to 12 GHz. The right angle Mini SMP interfaces on the PE-P047 cable allow 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Mini SMP Female Right Angle to Mini SMP Female Right Angle Cable Using PE-P047 Coax with 180 Deg. Clock PE3C5004/PH180

Pasternack Enterprises, Inc. • P.O. Box 16759, Irvine, CA 92623
Phone: (866) 727-8376 or (949) 261-1920 • **Fax:** (949) 261-7451
Sales@Pasternack.com • Techsupport@Pasternack.com

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TECHNICAL DATA SHEET PE3C5004/PH180

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
RF Shielding	90			dB
Capacitance		29 [95.14]		pF/ft [pF/m]

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2500	5000	12000	MHz	
PE3C5004/PH180	Custom Lengths Available	Insertion Loss (Typ.)	0.17	0.34	0.539	0.787	1.304	dB/ft	
			0.56	1.12	1.77	2.59	4.28	dB/m	
PE3C5004/PH180-6	6 inch	Insertion Loss (Typ.)	0.16	0.27	0.43	0.62	1	dB	0.004
PE3C5004/PH180-12	12 inch	Insertion Loss (Typ.)	0.25	0.44	0.7	1.02	1.66	dB	0.005
PE3C5004/PH180-24	24 inch	Insertion Loss (Typ.)	0.42	0.78	1.24	1.8	2.96	dB	0.008
PE3C5004/PH180-36	36 inch	Insertion Loss (Typ.)	0.59	1.12	1.78	2.59	4.26	dB	0.011
PE3C5004/PH180-48	48 inch	Insertion Loss (Typ.)	0.76	1.46	2.32	3.38	5.57	dB	0.014

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:	0.05*SQRT(FGHz)	dB
Loss due to Connector 2:	0.05*SQRT(FGHz)	dB
Base Weight:	0.005	pounds
Additional Weight per Inch:	0.00025	pounds

Mechanical Specifications

Cable Assembly

Weight	0.005 lbs [2.27 g]

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Cable

Cable Type	PE-P047
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	FEP
Number of Shields	2
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	FEP, Blue
Jacket Diameter	0.056 in [1.42 mm]
One Time Minimum Bend Radius	0.2 in [5.08 mm]
Repeated Minimum Bend Radius	0.4 in [10.16 mm]

Connectors

Description	Connector 1	Connector 2
Type	Mini SMP Female Right Angle Push-On	Mini SMP Female Right Angle Push-On
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Material and Plating	Brass, Gold	Brass, Gold

Environmental Specifications

Temperature

Operating Range	-55 to +155 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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TECHNICAL DATA SHEET PE3C5004/PH180

How to Order

Part Number Configuration: **PE3C5004/PH180 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- PE3C5004/PH180 — Base Number

Example: PE3C5004/PH180-12 = 12 inches long cable
PE3C5004/PH180-100cm = 100 cm long cable

Mini SMP Female Right Angle to Mini SMP Female Right Angle Cable Using PE-P047 Coax with 180 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: Mini SMP Female Right Angle to Mini SMP Female Right Angle Cable Using PE-P047 Coax with 180 Deg. Clock PE3C5004/PH180

URL: https://www.pasternack.com/mini-smp-female-right-angle-to-mini-smp-female-cable-using-pe-p047-with-180-deg.-clock-pe3c5004-ph180-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.

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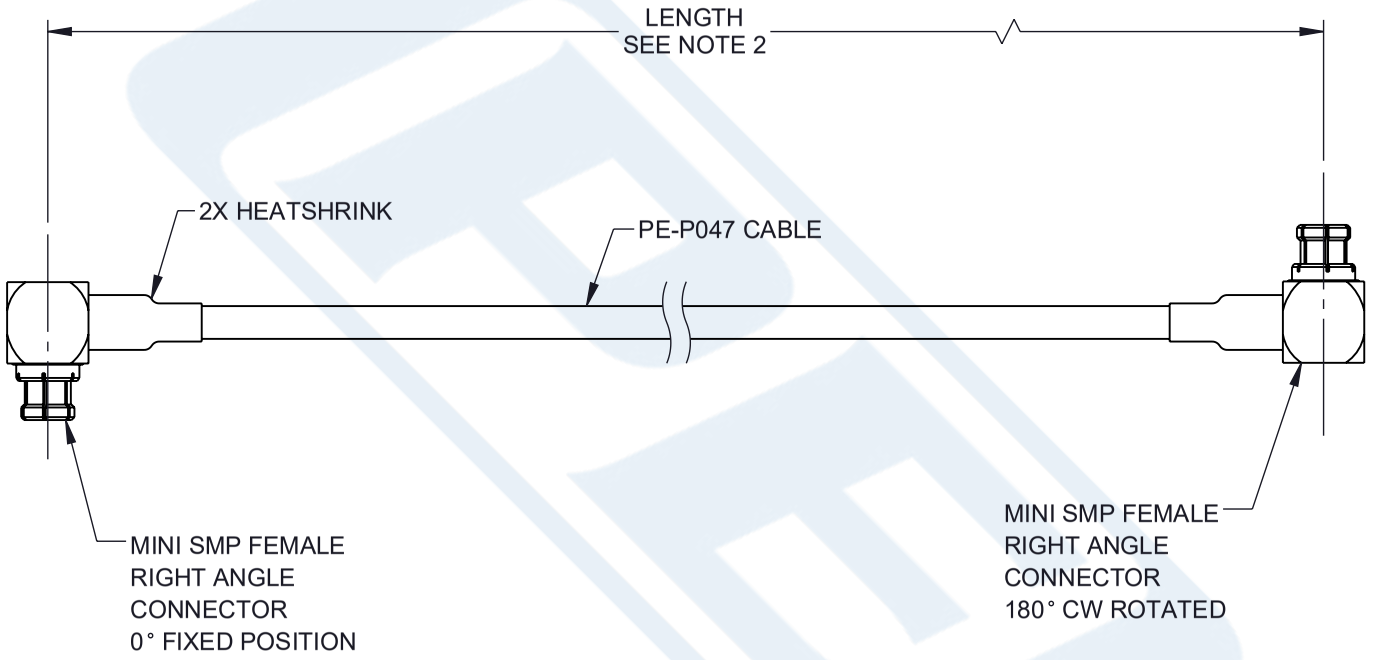
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PE3C5004/PH180 REV 1.0

PE3C5004/PH180 CAD Drawing

Mini SMP Female Right Angle to Mini SMP Female Right Angle Cable Using PE-P047 Coax with 180 Deg. Clock

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



NOTES:

1. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION

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

TOLERANCES:

.X = ±.2 [5]	FRACTIONS
.XX = ±.02 [0.5]	± 1/32
.XXX = ±.005 [0.13]	ANGLES ± 1°

CABLE LENGTH TOLERANCES:
≤12 [305] = +1 [25] / -0
>12 [305] ≤ 60 [1524] = +2 [51] / -0
>60 [1524] ≤ 120 [3048] = +4 [102] / -0
>120 [3048] ≤ 300 [7620] = +6 [152] / -0
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE.
UN-DIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION
COLORS MAY VARY

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE	SHEET
NONE	1 OF 1

DESCRIPTION

MINI SMP FEMALE RIGHT ANGLE TO MINI SMP FEMALE RIGHT ANGLE CABLE USING PE-P047 COAX WITH 180 DEG. CLOCK

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	BPUCHASKI	PE3C5004/PH180	A

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PE DS Rev-D4 Asize