



SMA Male Right Angle to SMA Male Right Angle Low Loss Cable Using PE-P195 Coax with 180 Deg. Clock

RF Cable Assemblies Technical Data Sheet

PE3C1909/PH180

Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Male Right Angle
- Cable Type: PE-P195

Features

- Max Frequency 12.4 GHz
- 70% Phase Velocity
- Triple Shielded
- FEP Jacket

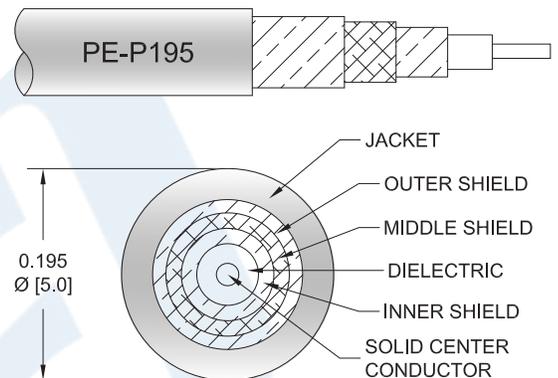
Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C1909/PH180 SMA male right angle to SMA male right angle cable using PE-P195 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 SMA cable assembly has a male to male gender configuration with 50 ohm flexible PE-P195 coax. The PE3C1909/PH180 SMA male to SMA male cable assembly operates to 12.4 GHz. The right angle SMA interfaces on the PE-P195 cable allow for easier connections in tight spaces. The triple shielding of this Pasternack cable assembly provides excellent shielding effectiveness.

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: [SMA Male Right Angle to SMA Male Right Angle Low Loss Cable Using PE-P195 Coax with 180 Deg. Clock PE3C1909/PH180](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		12.4	GHz
VSWR			1.4:1	
Velocity of Propagation		70		%
Capacitance		29 [95.14]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	12.4	GHz
Insertion Loss (Typ.)	0.088	0.125	0.196	0.315	0.512	dB/ft
	0.29	0.41	0.64	1.03	1.68	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.072 lbs [32.66 g]

Cable

Cable Type PE-P195
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper Clad Steel, Silver
 Dielectric Type PTFE
 Number of Shields 3
 Shield Layer 1 Silver Plated Copper Braid
 Shield Layer 2 Aluminum Tape
 Shield Layer 3 Silver Plated Copper Braid
 Jacket Material FEP, Tan
 Jacket Diameter 0.195 in [4.95 mm]
 Repeated Minimum Bend Radius 1 in [25.4 mm]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male Right Angle
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Brass, Gold
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100 µin minimum
Coupling Nut Material and Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Specification	100 µin minimum	100 µin minimum
Hex Size	5/16 inch	5/16 inch
Torque	3 in-lbs [0.34 Nm]	3 in-lbs [0.34 Nm]

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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PE3C1909/PH180

How to Order

Part Number Configuration:

PE3C1909/PH180

- **xx**

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Unit of Measure:
cm = Centimeters
<blank> = Inches
Length
Base Number

Example: PE3C1909/PH180-12 = 12 inches long cable
PE3C1909/PH180-100cm = 100 cm long cable

SMA Male Right Angle to SMA Male Right Angle Low Loss Cable Using PE-P195 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.

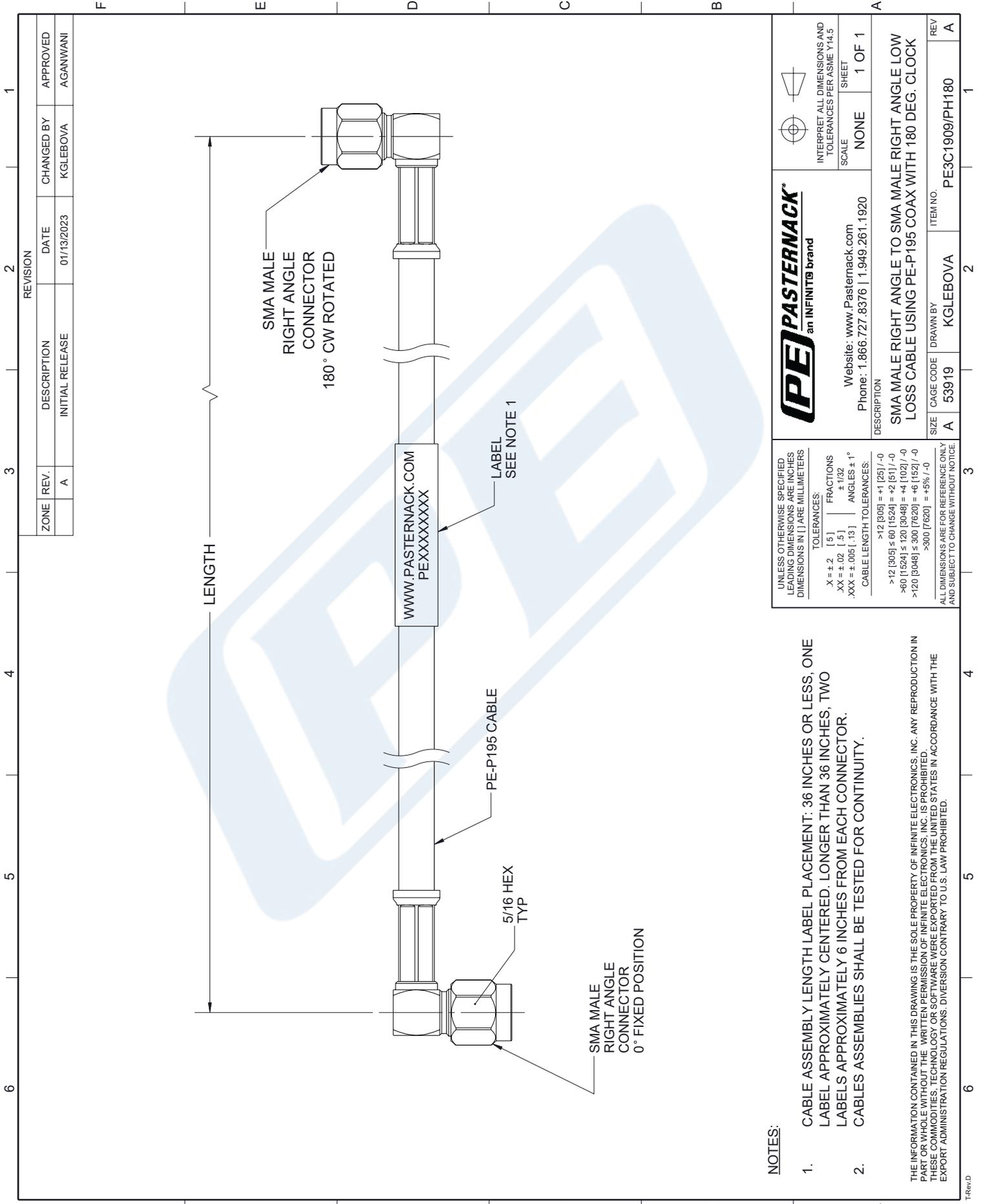
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URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-male-low-loss-cable-using-pe-p195-with-180-deg.-clock-pe3c1909-ph180-p.aspx>

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.

PE3C1909/PH180 CAD Drawing

SMA Male Right Angle to SMA Male Right Angle Low Loss Cable Using PE-P195 Coax with 180 Deg. Clock



ZONE		REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED
		A	INITIAL RELEASE	01/13/2023	KGLEBOVA	AGANWANI

REVISION	
1	

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	SHEET
SCALE	1 OF 1

Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920	

DESCRIPTION	SIZE	CAGE CODE	DRAWN BY	ITEM NO.
SMA MALE RIGHT ANGLE TO SMA MALE RIGHT ANGLE LOW LOSS CABLE USING PE-P195 COAX WITH 180 DEG. CLOCK	A	53919	KGLEBOVA	PE3C1909/PH180

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X = ± 2 [.5]	± 1/32
.XX = ± .02 [.5]	ANGLES ± 1°
.XXX = ± .005 [.13]	CABLE LENGTH TOLERANCES:
	>12 [305] = +1 [25] / -0
	>60 [1524] = +2 [51] / -0
	>120 [3048] = +4 [102] / -0
	>300 [7620] = +6 [152] / -0
	>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

- NOTES:**
- 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.
 - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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