



## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax

### TECHNICAL DATA SHEET

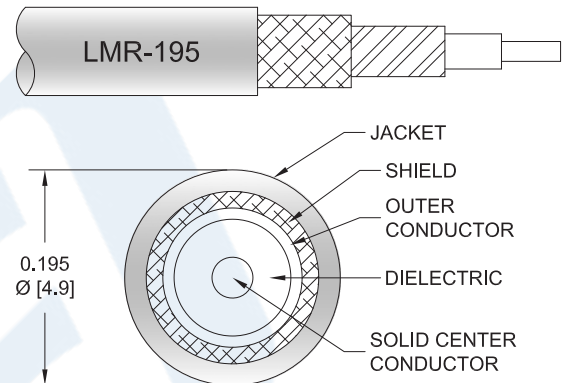
PE3C1590

#### Configuration

- Connector 1: SMA Male Right Angle
- Connector 2: SMA Female
- Cable Type: LMR-195
- Coax Flex Type: Flexible

#### Features

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



#### Applications

- General Purpose
- Laboratory Use

#### Description

Pasternack's PE3C1590 SMA male right angle to SMA female cable using LMR-195 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 female gender configuration with 50 ohm flexible LMR-195 coax. The PE3C1590 SMA male to SMA female cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-195 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.

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 Female Low Loss Cable Using LMR-195 Coax PE3C1590](#)



## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax

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**PE3C1590**

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Group Delay		1.27 [4.17]		ns/ft [ns/m]
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Inductance		0.064 [0.21]		uH/ft [uH/m]
DC Resistance Inner Conductor		7.6 [24.93]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			3,000	Vrms

#### Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	5800	MHz	
PE3C1590	Custom Lengths Available	Insertion Loss (Typ.)	0.06	0.08	0.12	0.19	0.3	dB/ft	
			0.19	0.27	0.39	0.63	0.99	dB/m	
PE3C1590-12	12 inch	Insertion Loss (Typ.)	0.36	0.39	0.42	0.49	0.6	dB	0.047
PE3C1590-24	24 inch	Insertion Loss (Typ.)	0.42	0.47	0.54	0.68	0.9	dB	0.07
PE3C1590-36	36 inch	Insertion Loss (Typ.)	0.48	0.55	0.65	0.87	1.2	dB	0.092
PE3C1590-48	48 inch	Insertion Loss (Typ.)	0.53	0.63	0.77	1.06	1.5	dB	0.114
PE3C1590-60	60 inch	Insertion Loss (Typ.)	0.59	0.71	0.88	1.25	1.8	dB	0.136

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:	0.047 pounds
Additional Weight per Inch:	0.00184 pounds

#### Mechanical Specifications

##### Cable Assembly

Weight 0.047 lbs [21.32 g]

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## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax

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#### Cable

Cable Type	LMR-195
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.195 in [4.95 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	0.2 lbs-ft [0.27 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

#### Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle Threaded	SMA Female Threaded
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100µ in. minimum	100µ in. minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100µ in. minimum	
Hex Size	5/16 in.	
Torque	5 in-lbs [0.57 Nm]	

#### Environmental Specifications

##### Temperature

Operating Range -40 to +85 deg C

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## SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax

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PE3C1590

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

#### Plotted and Other Data

Notes:

- Values at 25°C, sea level.

#### How to Order

Part Number Configuration:

PE3C1590 - xx uu

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

Example: PE3C1590-12 = 12 inches long cable  
PE3C1590-100cm = 100 cm long cable

SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 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.

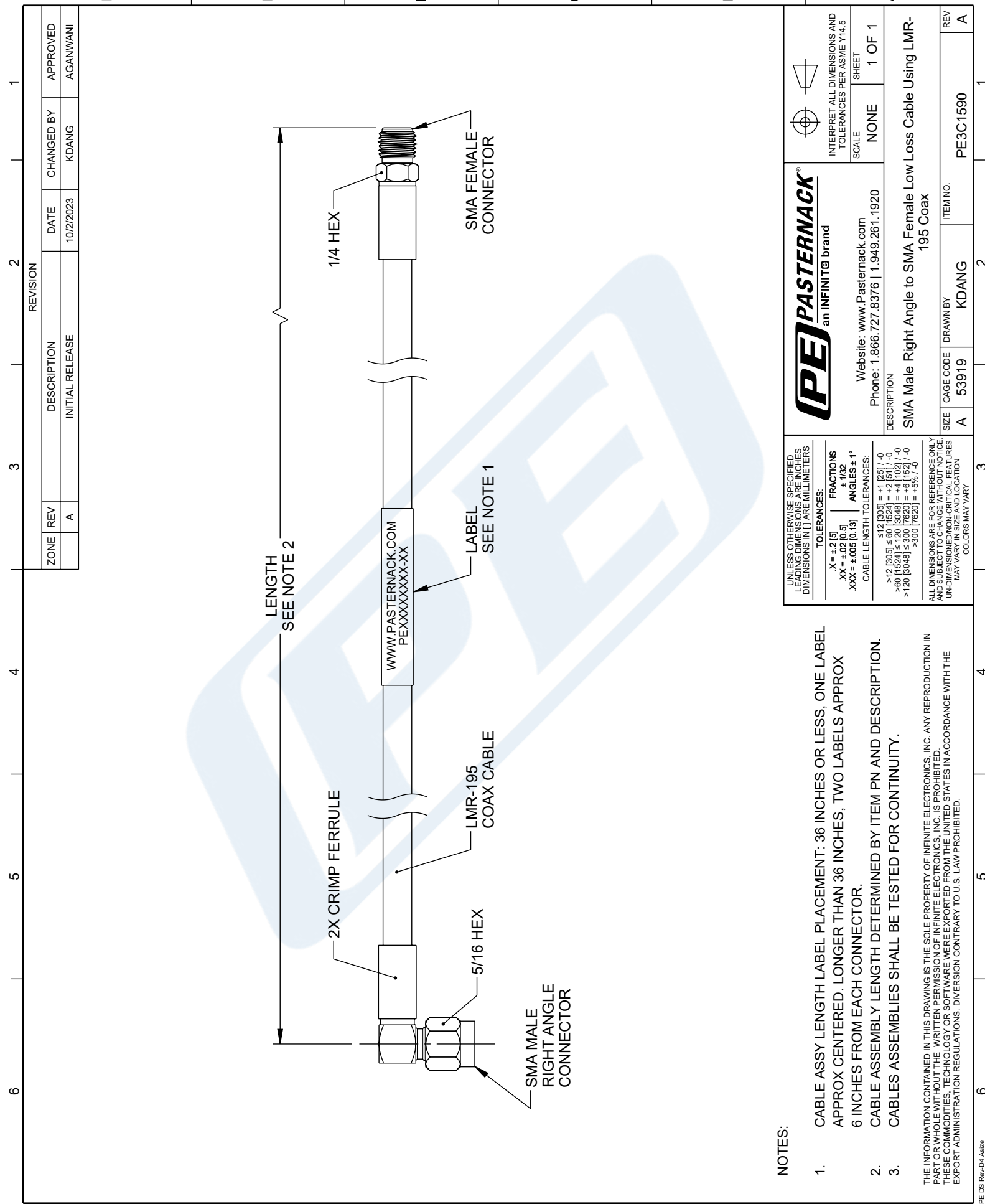
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URL: <https://www.pasternack.com/sma-male-right-angle-to-sma-female-low-loss-cable-using-lmr-195-pe3c1590-p.aspx>

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.

# PE3C1590 CAD Drawing

SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax



REVISION			
ZONE	REV	DESCRIPTION	DATE
	A	INITIAL RELEASE	10/2/2023
		CHANGED BY	AGANWANI
		KDANG	

<b>PASTERNAK</b> an INFINITI <sup>®</sup> brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
Website: <a href="http://www.Pasternack.com">www.Pasternack.com</a> Phone: 1.866.727.8376   1.949.261.1920		
DESCRIPTION <b>SMA Male Right Angle to SMA Female Low Loss Cable Using LMR-195 Coax</b>		
SIZE: A CAGE CODE: 53919 DRAWN BY: KDANG	ITEM NO.: PE3C1590	REV: A

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

**TOLERANCES:**

X = ± 2 [5]	FRACTIONS ± 1/32
.XX = ± 0.02 [0.5]	ANGLES ± 1°
.XXX = ± 0.05 [0.13]	

**CABLE LENGTH TOLERANCES:**

< 12 [305]	± 1 [25] / -0
> 12 [305] ≤ 60 [1524]	± 2 [51] / -0
> 60 [1524] ≤ 120 [3048]	± 4 [102] / -0
> 120 [3048]	± 8 [93] / -0

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

- NOTES:**
- CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
  - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
  - CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
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