

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



RF Cable Assemblies Technical Data Sheet

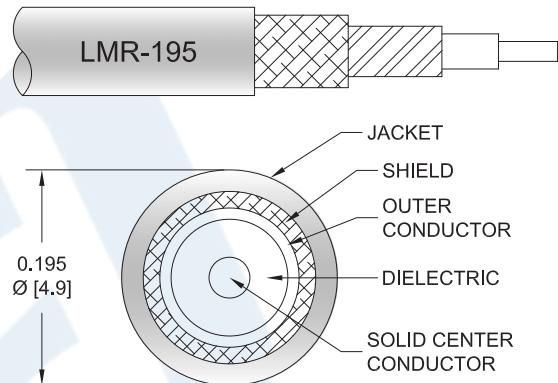
PE3C0168

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: LMR-195

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 PE3C0168 SMA male 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 PE3C0168 SMA male to SMA female cable assembly operates to 5.8 GHz. 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 to SMA Female Low Loss Cable Using LMR-195 Coax PE3C0168](#)



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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]		Ω/1000ft [Ω/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ω/1000ft [Ω/Km]
Jacket Spark			3,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.057	0.081	0.116	0.19	0.299	dB/ft
	0.19	0.27	0.38	0.62	0.98	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications
Cable Assembly

Weight	0.046 lbs [20.87 g]
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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]

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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	SMA Female
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material and Plating	Brass, Gold	Beryllium Copper, Gold
Contact Plating Specification	50 μ in minimum	50 μ in. minimum
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Nickel
Outer Conductor Plating Specification		100 μ in. minimum
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 μ in minimum	100 μ in. minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 μ in minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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RF Cable Assemblies Technical Data Sheet**PE3C0168****How to Order**

Part Number Configuration:

PE3C0168- **xx****uu**

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

Example: PE3C0168-12 = 12 inches long cable
PE3C0168-100cm = 100 cm long cable

SMA Male 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.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Female Low Loss Cable Using LMR-195 Coax PE3C0168](#)

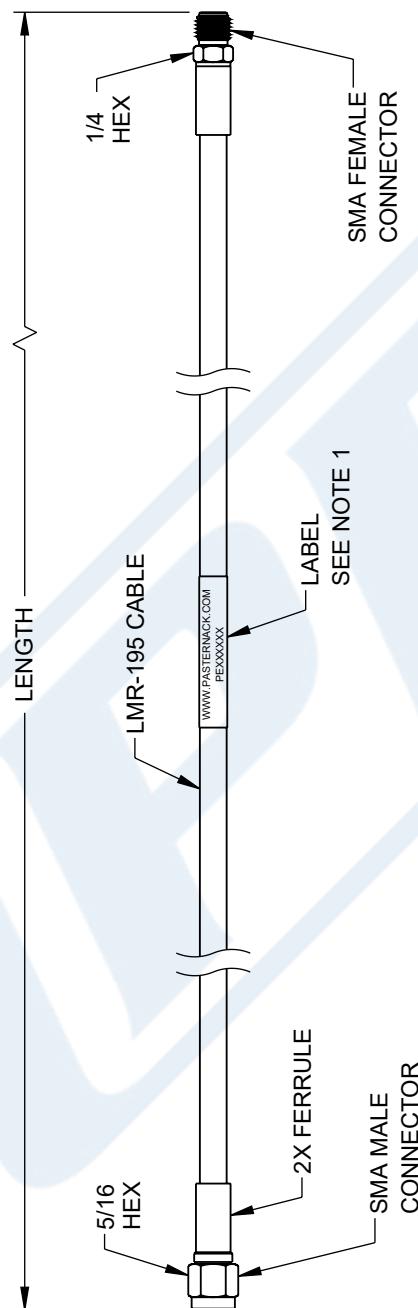
URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-195-pe3c0168-p.aspx>

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.

PE3C0168 CAD Drawing

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

ZONE	REV.	DESCRIPTION	DATE	CHANGED BY	APPROVED BY
	A	INITIAL RELEASE	04/13/2023	BPUCHASKI	AGANWAN



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 EOP CONTINUITY

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 PASTERNACK® an INFINITI® brand		 		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5	
				SCALE	SHEET
				NONE	1 OF 1
<p>DESCRIPTION</p> <p>SMA Male to SMA Female Low Loss Cable Using LMR-195 Coax</p>					
SPECIFIED LENGTHS IN INCHES AND MILLIMETERS		ACTIONS $\pm 1/32$ REF. DIMENSIONS: 1.125[28.5] -0 1.2[31] -0 1.4[35.6] -0 6.112[152] -0 15.6[395] -0		ITEM NO. PEE3C0168	
SIZE	CAGE CODE	DRAWN BY	ITEM NO.		
A	53919	BPUCHASKI	PEE3C0168		
REFERENCE ONLY OUT NOTICE					