



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

TECHNICAL DATA SHEET

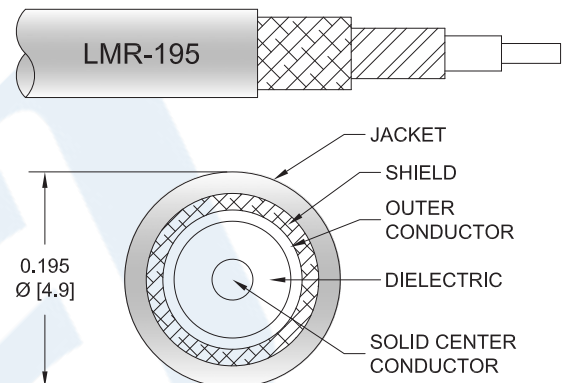
PE3C0168LF

Configuration

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

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3C0168LF 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 PE3C0168LF SMA male to SMA female cable assembly operates to 6 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, LF Solder PE3C0168LF](#)



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
PE3C0168LF	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	
PE3C0168LF-12	12 inch	Insertion Loss (Typ.)	0.26	0.29	0.32	0.39	0.5	dB	0.046
PE3C0168LF-24	24 inch	Insertion Loss (Typ.)	0.32	0.37	0.44	0.58	0.8	dB	0.069
PE3C0168LF-36	36 inch	Insertion Loss (Typ.)	0.38	0.45	0.56	0.77	1.1	dB	0.091
PE3C0168LF-48	48 inch	Insertion Loss (Typ.)	0.43	0.53	0.67	0.96	1.4	dB	0.113
PE3C0168LF-60	60 inch	Insertion Loss (Typ.)	0.49	0.61	0.79	1.15	1.7	dB	0.135

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:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.046 pounds
Additional Weight per Inch:	0.00184 pounds

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]
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 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	50 µin minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Nickel	Brass, Nickel
Body Plating Specification	100 µin minimum	100µ in. minimum
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	100 µin minimum	
Hex Size	5/16 inch	
Torque	3 in-lbs [0.34 Nm]	

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

PE3C0168LF - xx uu

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

Example: PE3C0168LF-12 = 12 inches long cable
PE3C0168LF-100cm = 100 cm long cable

SMA Male to SMA Female Low Loss Cable Using LMR-195 Coax, LF Solder 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, LF Solder PE3C0168LF](#)

URL: <https://www.pasternack.com/sma-male-to-sma-female-low-loss-cable-using-lmr-195-lf-solder-pe3c0168lf-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.

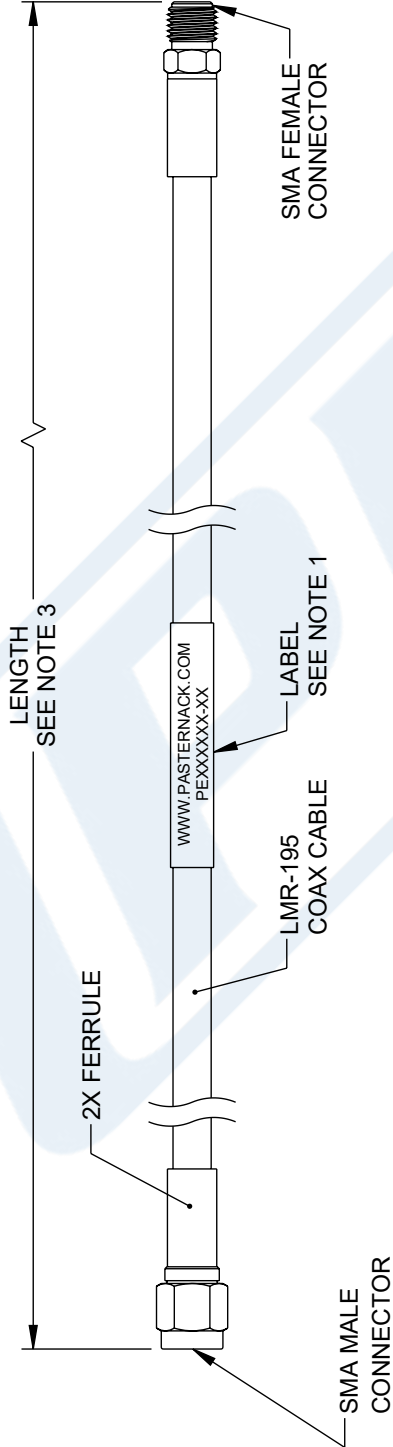
PE3C0168LF CAD Drawing

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

F E D C B A

1 2 3 4 5 6

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	10/13/2023	KGLEBOVA	AGANWANI



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

	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1
	Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920
DESCRIPTION SMA MALE TO SMA FEMALE LOW LOSS CABLE USING LMR-195 COAX, LF SOLDER	
SIZE A CAGE CODE 53919 DRAWN BY KGLEBOVA ITEM NO. PE3C0168LF	REV A

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

TOLERANCES:

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

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1525]	± .1 [25] / -0
>60 [1524] ≤ 120 [3048]	± .2 [5] / -0
>120 [3048] ≤ 300 [7620]	± .4 [10.2] / -0
>300 [7620]	± .5 [12.7] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE NON-CRITICAL FEATURES. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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