

1 M SMA to SMA M/F 195 Series Low Loss Cable Jumper

CA195LL037-1M

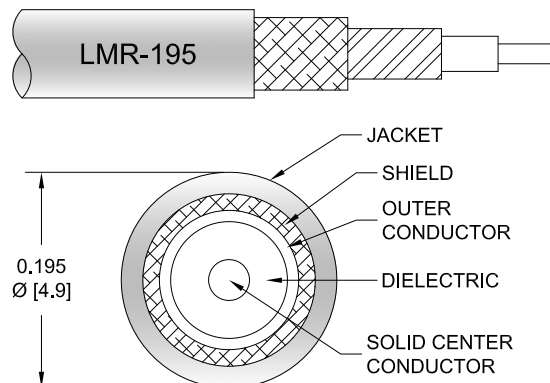


Configuration

- Connector 1: SMA Male
- Connector 2: SMA Female
- Cable Type: PPBC-195LL

Features

- LMR Equivalent Coax
- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 80% Phase Velocity
- Low Insertion Loss
- Double Shielded
- PE Jacket
- One Time Bend Radius of 0.5 Inches



Applications

- General Purpose
- Laboratory Use
- Antenna Installations
- Land Mobile Radio & Other Communication Systems
- Cellular & Wi-Fi Systems

Description

PolyPhaser CA195LL037-1M is a 1 meter SMA to SMA M/F 195 Series Low Loss Cable Jumper is built using high quality components by skilled technicians to ensure a reliable product. The SMA M and SMA F cable jumper connections are designed to industry standard interface dimensions to ensure superior performance. All of these products are available for same day shipment to fulfill your urgent needs. This high-quality RF coaxial assembly is perfect in many RF Interconnect applications such as Wireless Lan, Land Mobile Radio (LMR), IoT network, and many other RF systems. The CA195LL037-1M SMA to SMA cable assembly is the perfect companion to PolyPhaser line of RF surge protection devices particularly when used as an antenna jumper cable.

The 195 Series coax used in these SMA to SMA assemblies is a 0.195 inch diameter coax with a black PE jacket. This cable's foam PE dielectric is low loss material with a phase velocity of 80% reducing the attenuation when compared to solid dielectric coax cables. PolyPhaser Low Loss 195 Series coax has a solid center conductor and uses a double shield consisting of a wire braid over a foil tape construction providing >90% shielding effectivity. The construction and materials of the CA195LL037-1M result in a coax cable assembly with 0.5 inch one time bend radius and a repeat bend radius of 2 inches. The cable assembly's combination of SMA to SMA M/F and 195 Series Low Loss Cable supports a maximum operating frequency of 5.8 GHz. You can find detailed performance specifications in the product datasheet. All PolyPhaser assemblies are tested and inspected prior to shipping.

For additional strength, these SMA M to SMA F cable assemblies have polyolefin heat shrink strain relief boots on both ends of the RF Cable Assembly Jumpers. The heat shrink booting uses a double walled epoxy filled material to prolong the life of the assembly.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[1 M SMA to SMA M/F 195 Series Low Loss Cable Jumper CA195LL037-1M](#)

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.3:1	
Velocity of Propagation		80		%
RF Shielding	90			dB
Capacitance		25.4 [83.33]		pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms
Jacket Spark			5,000	Vrms

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Max.)	2.57	3.35	4.93	7.69	12.02	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Size

Length	39.37 in [100 cm]
Diameter	0.195 in [4.95 mm]
Weight	0.0929 lbs [42.14 g]

Cable

Cable Type	PPBC-195LL
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]

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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	50µ in. minimum	50µ in. minimum
Dielectric Type	Teflon	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	16-May in	
Torque	5 in-lbs [0.57 Nm]	

Environmental Specifications

Temperature

Operating Range

-40 to +85 deg C

Compliance Certifications

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [1 M SMA to SMA M/F 195 Series Low Loss Cable Jumper CA195LL037-1M](#)

URL: <https://www.polyphaser.com/1-m-sma-to-sma-m-f-195-series-low-loss-cable-jumper-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. PolyPhaser reserves the right to make such changes

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as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

1 M SMA to SMA M/F 195 Series Low Loss Cable Jumper

CA195LL037-1M CAD Drawing

REV. A

DESCRIPTION

DATE 07/26/2020

APPROVED SELLIS

REVISIONS

LENGTH MEASURED FROM CONTACT TO CONTACT

2X HEAT SHRINK BOOTING

LOW LOSS 195 SERIES COAX

SMA MALE

SMA FEMALE

LABEL (SEE NOTE 1)

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

TOLERANCES:
X = +2 [5.08] FRACTIONS
.XX = +.02 [.51]
.XXX = +.005 [.13]
ANGLES ± 1°
CABLE LENGTH (L) TOLERANCES:
L ≤ 12 [305] = +1 [25] / -0
12 [305] < L ≤ 60 [1524] = +2 [51] / -0
60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
300 [7620] < L = +6% L / -0
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

PolyPhaser
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10701 Airport Road, Hayden, Idaho 83835, USA
Phone: 1.208.635.6400 | 1.800.882.9110
Fax: 1.208.762.6133
Website: www.PolyPhaser.com
E-mail: CustomerService@PolyPhaser.com

SIZE A

CAGE CODE 30992

DRAWN BY MVEERAPPAN

ITEM NO. CA195LL037

NOTES:

1. CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE FRONT OF THE CONNECTOR.

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