



FMCA100282

Configuration

Connector 1: SMB Plug
Connector 2: SMA Male
Cable Type: LMR-195-UF
Coax Flex Type: Flexible

Features

- · Max Frequency 4 MHz
- · Shielding Effectivity > 90 dB
- · 74% Phase Velocity
- · Double Shielded
- TPE Jacket

Applications

General Purpose

· Laboratory Use

Description

The SMB plug to SMA male cable using LMR-195-UF coax, part number FMCA100282, from Fairview Microwave is in-stock and ships same day. This Fairview SMB to SMA cable assembly has a plug to male gender configuration with 50 ohm flexible LMR-195-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100282 SMB plug to SMA male cable assembly operates to 4 MHz. The double shielding of this Fairview 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 RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		4	GHz
VSWR			1.3:1	
Velocity of Propagation		74		%
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		9.5 [31.17]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		4.9 [16.08]		Ohms/1000ft [Ohms/Km]
Operating Voltage (AC)			335	Vrms





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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

Specifications by Frequency

peomedicine by 1 req		Description	F1	F2	F3	F4	F5	Units	
Part Number	Length	Frequency	100	250	500	1000	4000	MHz	Weight (lbs)
FMCA100282	Custom Lengths	Insertion Loss (Typ.)	0.042	0.068	0.097	0.132	0.285	dB/ft	
FIVICATUUZ8Z	Available	insertion Loss (Typ.)	0.14	0.23	0.32	0.44	0.94	dB/m	
FMCA100282-12	12 Inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.34	0.49	dB	0.052
FMCA100282-24	24 Inch	Insertion Loss (Typ.)	0.29	0.34	0.4	0.47	0.77	dB	0.073
FMCA100282-36	36 Inch	Insertion Loss (Typ.)	0.33	0.41	0.5	0.6	1.06	dB	0.094
FMCA100282-60	60 Inch	Insertion Loss (Typ.)	0.41	0.54	0.69	0.86	1.63	dB	0.136
FMCA100282-300	300 Inch	Insertion Loss (Typ.)	1.25	1.9	2.63	3.5	7.33	dB	0.556

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: 0.052 pounds Additional Weight per Inch: 0.00175 pounds

Electrical Specification Notes: Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm] Weight 0.052 lbs [23.59 g]

Cable

Cable Type LMR-195-UF Impedance 50 Ohms Inner Conductor Type Stranded Inner Conductor Material and Plating Copper Foam PE

Dielectric Type Number of Shields

Shield Layer 1 Aluminum Tape Shield Layer 2 **Tinned Copper** TPE, Black Jacket Material

0.195 in [4.95 mm] Jacket Diameter 0.5 in [12.7 mm] One Time Minimum Bend Radius Repeated Minimum Bend Radius 2 in [50.8 mm] Bending Moment 0.1 lbs-ft [0.14 N-m] Flat Plate Crush 10 lbs/in [0.18 Kg/mm]

Tensile Strength 40 lbs [18.14 Kg]





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Connectors

Description	Connector 1	Connector 2
Туре	SMB Plug	SMA Male
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	30 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
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

Environmental Specifications

Operating Range Temperature

-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.

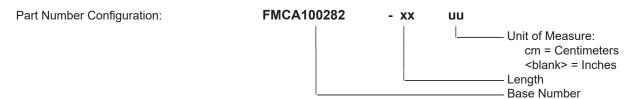




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Typical Performance Data

How to Order



Example: FMCA100282-12 = 12 inches long cable

FMCA100282-100cm = 100 cm long cable

Low Loss SMB Plug to SMA Male Cable LMR-195-UF Coax from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Low Loss SMB Plug to SMA Male Cable LMR-195-UF Coax FMCA100282

URL: https://www.fairviewmicrowave.com/low-loss-smb-plug-to-sma-male-cable-lmr-195-uf-coax-fmca100282-p.aspx

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