

Low Loss RP SMA Male to RP SMA Female Cable LMR-240-UF Coax with LF Solder



FMCA100237

Configuration

- Connector 1: SMA Male Reverse Polarity
- Connector 2: SMA Female Reverse Polarity
- Cable Type: LMR-240-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The RP SMA male to RP SMA female cable using LMR-240-UF coax, part number FMCA100237, from Fairview Microwave is in-stock and ships same day. This Fairview reverse polarity SMA to reverse polarity SMA cable assembly has a male to female gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100237 reverse polarity SMA male to reverse polarity SMA female cable assembly operates to 6 GHz. 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		6	GHz
VSWR			1.35:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Jacket Spark			5,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	
FMCA100237	Custom Lengths Available	Insertion Loss (Typ.)	0.046	0.066	0.096	0.155	0.212	dB/ft	
			0.16	0.22	0.32	0.51	0.7	dB/m	
FMCA100237-12	12 inch	Insertion Loss (Typ.)	0.25	0.27	0.3	0.36	0.42	dB	0.058
FMCA100237-24	24 inch	Insertion Loss (Typ.)	0.3	0.34	0.4	0.51	0.63	dB	0.091
FMCA100237-36	36 inch	Insertion Loss (Typ.)	0.34	0.4	0.49	0.67	0.84	dB	0.123
FMCA100237-60	60 inch	Insertion Loss (Typ.)	0.43	0.53	0.68	0.98	1.26	dB	0.187
FMCA100237-300	300 inch	Insertion Loss (Typ.)	1.35	1.85	2.6	4.08	5.5	dB	0.827

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: 0.058 pounds
 Additional Weight per Inch: 0.00267 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.058 lbs [26.31 g]

Cable

Cable Type LMR-240-UF
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 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 TPE, Black
 Jacket Diameter 0.24 in [6.1 mm]
 One Time Minimum Bend Radius 0.75 in [19.05 mm]
 Repeated Minimum Bend Radius 2.5 in [63.5 mm]
 Bending Moment 0.13 lbs-ft [0.18 N-m]
 Flat Plate Crush 13 lbs/in [0.23 Kg/mm]
 Tensile Strength 80 lbs [36.29 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male Reverse Polarity	SMA Female Reverse Polarity
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Gold	Brass, Gold
Coupling Nut Material and Plating	Brass, Gold	Brass, Gold
Hex Size	5/16 inch	
Torque	5 in-lbs 0.57 Nm	

Environmental Specifications

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

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **FMCA100237** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100237-12 = 12 inches long cable
FMCA100237-100cm = 100 cm long cable

Low Loss RP SMA Male to RP SMA Female Cable LMR-240-UF Coax with LF Solder 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 RP SMA Male to RP SMA Female Cable LMR-240-UF Coax with LF Solder FMCA100237](#)

URL: <https://www.fairviewmicrowave.com/low-loss-rp-sma-male-to-rp-sma-female-cable-lmr-240-uf-coax-with-lf-solder-fmca100237-p.aspx>

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