

Low Loss SMA Female to RA MMCX Plug Cable LMR-100 Coax

The SMA female to RA MMCX plug cable using LMR-100 coax, part number FMCA3173, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to MMCX cable assembly has a female to plug gender configuration with 50 ohm flexible LMR-100A-PVC coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3173 SMA female to MMCX plug cable assembly operates to 5.8 GHz. The right angle MMCX interface on the LMR-100A-PVC cable allows for easier connections in tight spaces. 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	Min	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		9.5 [31.17]		Ω /1000ft [Ω /Km]
Jacket Spark			2,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.11	0.16	0.24	0.39	0.64	dB/ft
	0.36	0.52	0.79	1.28	2.1	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB for the right angle connector and 0.1 dB for the straight connector.

Mechanical Specifications

Cable Assembly

Weight 0.03 lbs [13.61 g]

Cable

Cable Type LMR-100A-PVC
 Impedance 50 Ohms



Configuration:

- SMA Female
- MMCX Plug Right Angle
- LMR-100A-PVC

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

Applications:

- General Purpose
- Laboratory Use

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Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Female	MMCX Plug
Specification	MIL-STD-348A	BS EN 122340
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	50µ in. minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Gold	
Outer Cond Plating Spec.	3µ in. minimum	
Body Material & Plating		Brass, Gold
Body Plating Spec.		3 µin minimum

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA3173 - xx uu

cm = Centimeters
 <blank> = Inches
 Length

Example: FMCA3173-12 = 12 inches long cable
 FMCA3173-100cm = 100 cm long cable

Low Loss SMA Female to RA MMCX Plug Cable LMR-100 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss SMA Female to RA MMCX Plug Cable LMR-100 Coax FMCA3173](https://www.fairviewmicrowave.com/low-loss-sma-female-to-ra-mmcx-plug-cable-lmr-100-coax-fmca3173-p.aspx)

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