

Low Loss UHF Male to SMA Male Cable LMR-400-UF Coax



FMCA100256

Configuration

- Connector 1: UHF Male
- Connector 2: SMA Male
- Cable Type: LMR-400-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- TPE Jacket

Applications

- General Purpose
- Laboratory Use

Description

The UHF male to SMA male cable using LMR-400-UF coax, part number FMCA100256, from Fairview Microwave is in-stock and ships same day. This Fairview UHF to SMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100256 UHF male to SMA male cable assembly operates to 3 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		3	GHz
VSWR			1.4:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]
Jacket Spark			8,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	100	250	500	1000	3000	
FMCA100256	Custom Lengths Available	Insertion Loss (Typ.)	0.015	0.023	0.035	0.5	0.085	dB/ft	
			0.05	0.08	0.12	1.65	0.28	dB/m	
FMCA100256-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.7	0.29	dB	0.196
FMCA100256-24	24 inch	Insertion Loss (Typ.)	0.23	0.25	0.27	1.2	0.37	dB	0.283
FMCA100256-36	36 inch	Insertion Loss (Typ.)	0.25	0.27	0.31	1.7	0.46	dB	0.37
FMCA100256-60	60 inch	Insertion Loss (Typ.)	0.28	0.32	0.38	2.7	0.63	dB	0.544
FMCA100256-300	300 inch	Insertion Loss (Typ.)	0.58	0.78	1.08	12.7	2.33	dB	2.284

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: 0.196 pounds
 Additional Weight per Inch: 0.00725 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.196 lbs [88.9 g]

Cable

Cable Type LMR-400-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 0.405 in [10.29 mm]
 One Time Minimum Bend Radius 1 in [25.4 mm]
 Repeated Minimum Bend Radius 4 in [101.6 mm]
 Bending Moment 0.38 lbs-ft [0.52 N-m]
 Flat Plate Crush 20 lbs/in [0.36 Kg/mm]
 Tensile Strength 160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	UHF Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Gold
Contact Plating Specification	200 µin	
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tin/Nickel	Brass, Gold
Body Plating Specification	100 µin	
Coupling Nut Material and Plating	Brass, Tin/Nickel	Brass, Gold
Coupling Nut Plating Specification	100 µin	
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:

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FMCA100256

Typical Performance Data

How to Order

Part Number Configuration:

FMCA100256

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

Example: FMCA100256-12 = 12 inches long cable
FMCA100256-100cm = 100 cm long cable

Low Loss UHF Male to SMA Male Cable LMR-400-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 UHF Male to SMA Male Cable LMR-400-UF Coax FMCA100256](https://www.fairviewmicrowave.com/low-loss-uhf-male-to-sma-male-cable-lmr-400-uf-coax-fmca100256-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-loss-uhf-male-to-sma-male-cable-lmr-400-uf-coax-fmca100256-p.aspx>

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FMCA100256 CAD Drawing

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