

## Times Microwave LMR-100A-FR Low Loss Flexible Coax Cable Black FRPE Jacket Fire Rated

### Times Microwave Systems Coax Cable Specification

LMR-100-FR Fire Rated version of the 100 series Low Loss Coax from Times Microwave is part of the large product offering by Fairview Microwave of radio frequency coaxial cable types specifically stocked to be ready for same-day shipment. Fairview Microwave LMR-100-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss and CMR riser rated 50 Ohm coax cable LMR-100-FR is constructed with a 0.110 inch diameter and Black FRPE jacket.

LMR-100-FR flexible 50 Ohm coax cable with FRPE jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.110 inch diameter and low loss fire rated coax cable is built with an aluminum double shield count and RF shielding of 90 dB. Times Microwave LMR-100-FR FRPE coax is constructed with PE dielectric and a maximum operating temperature of 85 degrees C. Fairview Microwave's offering of LMR-100-FR coax cable provides specs for this wire on its RF coax cable LMR-100-FR datasheet.

LMR-100-FR cable is part of more than one million RF, microwave parts in stock at Fairview Microwave. This Times Microwave low loss flexible LMR-100-FR coax cable is ready to buy and can be shipped worldwide. Fairview Microwave also maintains a wide selection of other radio frequency coaxial cable types that ship same-day from our warehouse as with the rest of our other RF/microwave components.

\* LMR™ is a trademark of Times Microwave Systems.

### Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		66		%
Time Delay		1.54 [5.05]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
DWV (DC)			500	Vdc
Jacket Spark			2,000	Vrms
Inner Conductor DC Resist.			81	Ohms/1000ft
Outer Conductor DC Resist.			9.5	Ohms/1000ft
Nominal Capacitance		30.8		pF/ft
		[101.05]		[pF/m]
Nominal Inductance		0.077		uH/ft
		[0.25]		[uH/m]
Input Power (Peak)			600	Watts

### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz
Attenuation, Typ	5.1 16.73	8.9 29.2	10.9 35.76	15.8 51.84	22.8 74.8	dB/100ft dB/100m



### Configuration:

- Low Loss, Outdoor Flexible Cable
- 2 Shield(s)

### Features:

- Max Operating Frequency of 5.8 GHz
- Phase Velocity 66% VoP
- Low Smoke, Zero Halogen FRPE Jacket
- CMR Riser Rated Coax
- Max Operating Temperature +85°C
- Min Install Bend Radius of 0.25 inches

### Applications:

- RF Test Systems
- In-Building Riser Runs
- Laboratory Applications
- Antenna Installs
- General Purpose RF Interconnect

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Power In (CW), Max	180	100	83	57	39	Watts
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Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	30.1	33.2	35.2	39.8	64.1	dB/100ft
	98.75	108.92	115.49	130.58	210.3	dB/100m
Power In (CW), Max	29	27	25	22	13	Watts

### Mechanical Specifications

Diameter	0.11 in 2.79 mm
Weight	0.0092 lbs/ft [0.01 Kg/m]
Min. Bend Radius (Installation)	0.25 in [6.35 mm]
Min. Bend Radius (Repeated)	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Tensile Strength	15 lbs [6.8 kg]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]

### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strands	0.018 in [0.46 mm]
Conductor Type	Solid	
Dielectric	PE	0.06 in [1.52 mm]
First Shield	Aluminum Tape	[ ]
Second Shield	Tinned Copper	[ ]
Jacket	FRPE, Black	0.11 in [2.79 mm]

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

### Plotted and Other Data

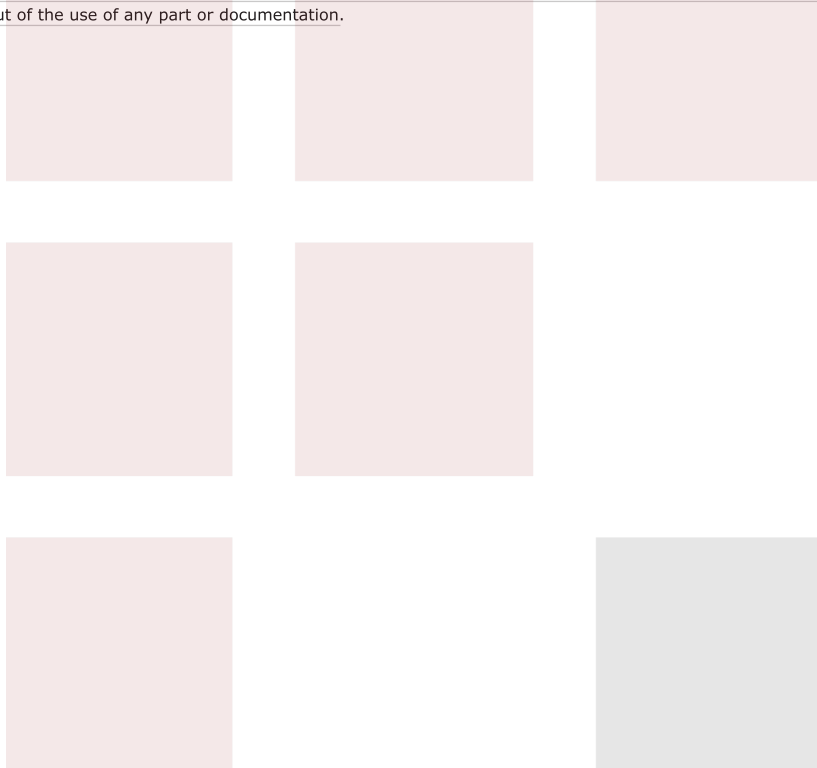
Notes:

Times Microwave LMR-100A-FR Low Loss Flexible Coax Cable Black FRPE Jacket Fire Rated from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

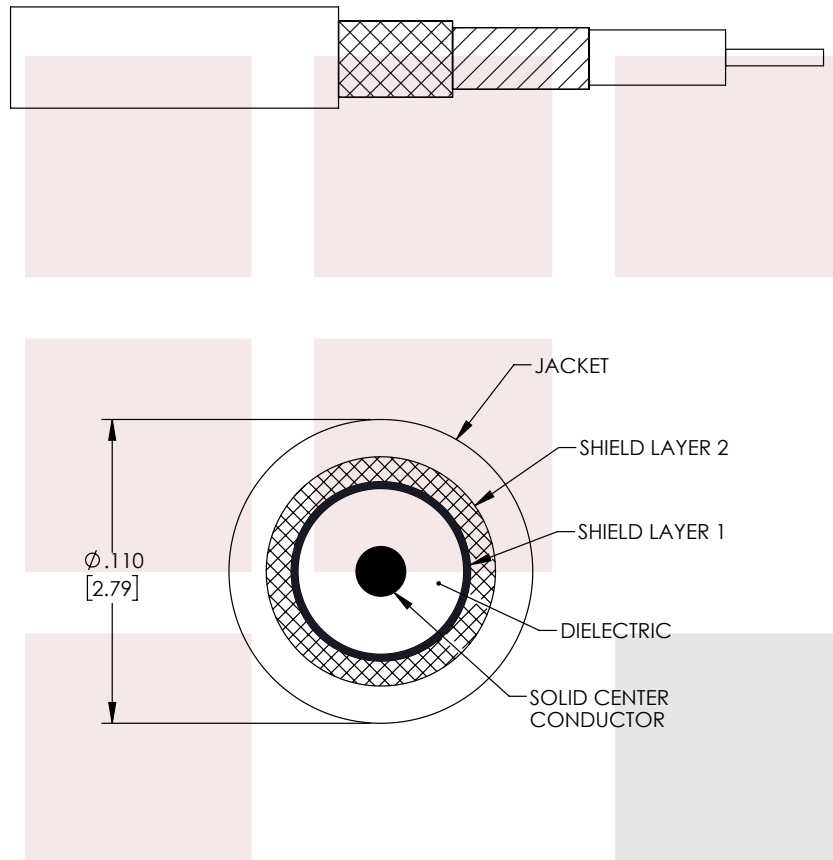
Click the following link to obtain additional part information: [Times Microwave LMR-100A-FR Low Loss Flexible Coax Cable Black FRPE Jacket Fire Rated LMR-100A-FR](#)

URL: <https://www.fairviewmicrowave.com/lmr100fr-low-loss-flexible-coax-cable-frpe-jacket-lmr-100a-fr-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. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	06-04-2021	SELLIS



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TITLE

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Coax Cable Black FRPE Jacket Fire Rated

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS  
.XX = ±.02 [.51] ± 1/32  
.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 = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	MVEERAPPAN	LMR-100A-FR	A

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