

LMR-100A-FR-FT DATA SHEET

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

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 | Тур | 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 Res | ist. | | 81 | Ohms/1000ft |
| Outer Conductor DC Res | | 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

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

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

Mechanical Specifications

Diameter Weight

Bending Moment Tensile Strength

Min. Bend Radius (Installation) Min. Bend Radius (Repeated)

Flat Plate Crush

0.11 in [2.79 mm] 0.0092 lbs/ft [0.01 kg/m]

0.25 in [6.35 mm] 1 in [25.4 mm] 0.1 lbs-ft [0.14 N-m] 15 lbs [6.8 kg]

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 Temperature

-40 to +85 deg C Operating Range -40 to +85 deg C Installation Range Storage Range -70 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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

The information contained in this document is accurate to the best of our knowledge and representative of the part

URL: https://www.fairviewmicrowave.com/lmr100fr-low-loss-flexible-coax-cable-frpe-jacket-lmr-100a-fr-ft-p.aspx

| described l | herein. It may be necessar | y to make | modifications to t | he part and/or | the documentation | of the part, in order |
|-------------|------------------------------|------------|--------------------|----------------|--------------------|-----------------------|
| | ent improvements. Fairview | | _ | | | |
| | specifications are nominal. | | | | | |
| | of the part described herein | | | and Fairview N | licrowave does not | assume any liability |
| arising out | of the use of any part or do | ocumentati | on. | | | |
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