

Low Loss Flexible LMR-100A-PVC Indoor / Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket



#### LMR-100A-PVC



# Configuration

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

### **Features**

- PVC Jacket
- Max operating temperature 85°C
- · Min Install Bend radius of 1 inches

- Phase Velocity 66% VoP
- · Max operating Frequency of 5.8 GHz

## **Applications**

- Antenna Installs
- RF Test systems

- · General Purpose RF Interconnect
- · Laboratory applications

## **Description**

LMR-100A-PVC coax cable from L-com is only one of a large number of radio frequency coaxial cable types specifically stocked to be ready for quick shipment. L-com Microwave LMR-100A-PVC coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This low loss flexible 50 Ohm coax cable LMR-100A-PVC is constructed with a 0.11 inch diameter and Black PVC jacket.

LMR-100A-PVC flexible 50 Ohm coax cable with PVC jacket is rated for a 5.8 GHz maximum operating frequency. This 50 Ohm 0.11 inch diameter and low loss flexible coax cable is built with a double shield count and RF shielding of 90 dB. L-com Microwave LMR-100A-PVC coax is constructed with PE dielectric and a maximum operating temperature of 85 degrees C. Times Microwave LMR-100A-PVC coax cable specs for this wire properties can be found on its RF coax cable LMR-100A-PVC datasheet.

LMR-100A-PVC cable is part of more than one million RF, microwave parts in stock at L-com. This Times Microwave low loss LMR-100A-PVC coax cable is ready to buy and can be shipped worldwide. L-com 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.

### **Electrical Specifications**

| Description                     | Minimum | Typical       | Maximum | Units        |
|---------------------------------|---------|---------------|---------|--------------|
| Frequency Range                 | DC      |               | 5.8     | GHz          |
| Cutoff Frequency                |         | 90            |         | GHz          |
| Impedance                       |         | 50            |         | Ohms         |
| Velocity of Propagation         |         | 66            |         | %            |
| Shielding Effectiveness         | 90      |               |         | dB           |
| Dielectric Withstanding Voltage | ge (DC) |               | 500     | Vdc          |
| Jacket Spark                    |         |               | 2,000   | Vrms         |
| Nominal Capacitance             |         | 30.8 [101.05] |         | pF/ft [pF/m] |
| Nominal Inductance              |         | 0.077 [0.25]  |         | uH/ft [uH/m] |
| Input Power (Peak)              |         |               | 600     | Watts        |

<sup>\*</sup> LMR™ is a trademark of Times Microwave Systems.



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## **Performance by Frequency Band**

| -                     | •     |        |        |        |       |          |
|-----------------------|-------|--------|--------|--------|-------|----------|
| Description           | F1    | F2     | F3     | F4     | F5    | Units    |
| Frequency             | 50    | 150    | 220    | 450    | 900   | MHz      |
| Attenuation, Typ      | 3.9   | 8.9    | 10.9   | 15.8   | 22.8  | dB/100ft |
|                       | 12.8  | 29.2   | 35.76  | 51.84  | 74.8  | dB/100m  |
| Input Power (CW), Max | 230   | 100    | 83     | 57     | 39    | Watts    |
|                       |       |        |        |        |       |          |
| 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  |
|                       |       |        |        | 22     | 13    | Watts    |

# **Mechanical Specifications**

Diameter Weight

Min. Bend Radius (Installation)

Min. Bend Radius (Repeated)

Bending Moment Tensile Strength Flat Plate Crush 0.11 in [2.79 mm] 0.01 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 Clad Steel 1 Strand(s) | 0.018in [0.46mm] |  |
| Conductor Type  | Solid                         |                  |  |
| Dielectric      | PE                            | 0.06in [1.52mm]  |  |
| First Shield    | Aluminum Tape                 |                  |  |
| Second Shield   | Tinned Copper Braid           |                  |  |
| Jacket          | PVC, Black                    | 0.11in [2.79mm]  |  |
|                 |                               |                  |  |



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# **Environmental Specifications**

**Temperature**Operating Range
Storage Range

-40°C to +85°C -70°C to +85°C

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Low Loss Flexible LMR-100A-PVC Indoor / Outdoor Rated Coax Cable Double Shielded with Black PVC Jacket from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within 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 impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

# **L-com CAD Drawing**

