

Low Loss QMA Male to QMA Male Cable LMR-195-UF Coax



FMCA100271

Configuration

- Connector 1: QMA Male
- Connector 2: QMA Male
- Cable Type: LMR-195-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 74% Phase Velocity
- Double Shielded
- TPE Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The QMA male to QMA male cable using LMR-195-UF coax, part number FMCA100271, from Fairview Microwave is in-stock and ships same day. This Fairview QMA to QMA cable assembly has a male to male gender configuration with 50 ohm flexible LMR-195-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100271 QMA male to QMA male cable assembly operates to 6 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 | | 6 | GHz |
| VSWR | | | 1.15:1 | |
| Velocity of Propagation | | 74 | | % |
| RF Shielding | 90 | | | dB |
| Group Delay | | 1.27 [4.17] | | ns/ft [ns/m] |
| Capacitance | | 25.4 [83.33] | | pF/ft [pF/m] |
| Inductance | | 0.064 [0.21] | | uH/ft [uH/m] |
| DC Resistance Inner Conductor | | 9.5 [31.17] | | Ohms/1000ft [Ohms/Km] |
| DC Resistance Outer Conductor | | 4.9 [16.08] | | Ohms/1000ft [Ohms/Km] |
| Operating Voltage (AC) | | | 333 | Vrms |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|---------|---------|-------|
| Dielectric Withstanding Voltage (AC) | | | 1,000 | Vrms |
| Jacket Spark | | | 3,000 | Vrms |

Specifications by Frequency

| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
|----------------|--------------------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
| | | Frequency | 250 | 500 | 1000 | 2500 | 5800 | MHz | |
| FMCA100271 | Custom Lengths Available | Insertion Loss (Typ.) | 0.068 | 0.097 | 0.139 | 0.226 | 0.356 | dB/ft | |
| | | | 0.23 | 0.32 | 0.46 | 0.75 | 1.17 | dB/m | |
| FMCA100271-12 | 12 Inch | Insertion Loss (Typ.) | 0.27 | 0.3 | 0.34 | 0.43 | 0.56 | dB | 0.051 |
| FMCA100271-24 | 24 Inch | Insertion Loss (Typ.) | 0.34 | 0.4 | 0.48 | 0.66 | 0.92 | dB | 0.072 |
| FMCA100271-36 | 36 Inch | Insertion Loss (Typ.) | 0.41 | 0.5 | 0.62 | 0.88 | 1.27 | dB | 0.093 |
| FMCA100271-60 | 60 Inch | Insertion Loss (Typ.) | 0.54 | 0.69 | 0.9 | 1.33 | 1.98 | dB | 0.135 |
| FMCA100271-300 | 300 Inch | Insertion Loss (Typ.) | 1.9 | 2.63 | 3.68 | 5.85 | 9.1 | dB | 0.555 |

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: 0.051 pounds

Additional Weight per Inch: 0.00175 pounds

Electrical Specification Notes:

Values at 25°C, sea level.

Mechanical Specifications

Cable Assembly

| | |
|----------------|---------------------|
| Width/Diameter | 0.5 in [12.7 mm] |
| Weight | 0.051 lbs [23.13 g] |

Cable

| | |
|--------------------------------------|------------------------|
| Cable Type | LMR-195-UF |
| Impedance | 50 Ohms |
| Inner Conductor Type | Stranded |
| Inner Conductor Material and Plating | Copper |
| Dielectric Type | Foam PE |
| Number of Shields | 2 |
| Shield Layer 1 | Aluminum Tape |
| Shield Layer 2 | Tinned Copper |
| Jacket Material | TPE, Black |
| Jacket Diameter | 0.195 in [4.95 mm] |
| One Time Minimum Bend Radius | 0.5 in [12.7 mm] |
| Repeated Minimum Bend Radius | 2 in [50.8 mm] |
| Bending Moment | 0.1 lbs-ft [0.14 N-m] |
| Flat Plate Crush | 10 lbs/in [0.18 Kg/mm] |
| Tensile Strength | 40 lbs [18.14 Kg] |

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Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------------|----------------------------|----------------------------|
| Type | QMA Male | QMA Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Mating Cycles | 500 | 500 |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Dielectric Type | PTFE | PTFE |
| Outer Conductor Material and Plating | Phosphor Bronze, Tri-Metal | Phosphor Bronze, Tri-Metal |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |

Environmental Specifications

Operating Range Temperature-40 to +85 deg C

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

Plotted and Other Data

Notes:
Values at 25°C, sea level.

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Typical Performance Data

How to Order

Part Number Configuration: **FMCA100271** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMCA100271-12 = 12 inches long cable
FMCA100271-100cm = 100 cm long cable

Low Loss QMA Male to QMA Male Cable LMR-195-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 QMA Male to QMA Male Cable LMR-195-UF Coax FMCA100271](#)

URL: <https://www.fairviewmicrowave.com/low-loss-qma-male-to-qma-male-cable-lmr-195-uf-coax-fmca100271-p.aspx>

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