



FMCA100262/0000

Configuration

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

Features

- · Max Frequency 8 GHz
- · Shielding Effectivity > 90 dB
- 74% Phase Velocity
- · Double Shielded
- TPE Jacket

Applications

General Purpose

· Laboratory Use

Description

The SMA male to type N male cable using LMR-195-UF coax, part number FMCA100262/0000, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N 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 FMCA100262/0000 SMA male to type N male cable assembly operates to 8 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 | | 8 | GHz |
| VSWR | | | 1.4:1 | |
| 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) | | | 500 | Vrms |
| Dielectric Withstanding Voltage (AC) | | | 500 | Vrms |





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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------|---------|---------|---------|-------|
| Jacket Spark | | | 3,000 | Vrms |

Specifications by Frequency

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|---------------------------|----------------|-----------------------|-------|-------|-------|-------|-------|-------|--------------|
| Part Number | Length | Description | F1 | F2 | F3 | F4 | F5 | Units | Weight (lbs) |
| | | Frequency | 250 | 500 | 1000 | 2500 | 5800 | MHz | weight (bs) |
| FMCA100262/0000 | Custom Lengths | Insertion Loss (Typ.) | 0.068 | 0.097 | 0.139 | 0.226 | 0.356 | dB/ft | |
| FIVICA100262/0000 | Available | | 0.23 | 0.32 | 0.46 | 0.75 | 1.17 | dB/m | |
| FMCA100262/0000-12 | 12 Inch | Insertion Loss (Typ.) | 0.27 | 0.3 | 0.34 | 0.43 | 0.56 | dB | 0.105 |
| FMCA100262/0000-24 | 24 Inch | Insertion Loss (Typ.) | 0.34 | 0.4 | 0.48 | 0.66 | 0.92 | dB | 0.126 |
| FMCA100262/0000-36 | 36 Inch | Insertion Loss (Typ.) | 0.41 | 0.5 | 0.62 | 0.88 | 1.27 | dB | 0.147 |
| FMCA100262/0000-60 | 60 Inch | Insertion Loss (Typ.) | 0.54 | 0.69 | 0.9 | 1.33 | 1.98 | dB | 0.189 |
| FMCA100262/0000-300 | 300 Inch | Insertion Loss (Typ.) | 1.9 | 2.63 | 3.68 | 5.85 | 9.1 | dB | 0.609 |

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:

0.105 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
 0.105 lbs [47.63 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 Diameter0.195 in [4.95 mm]One Time Minimum Bend Radius0.5 in [12.7 mm]Repeated Minimum Bend Radius2 in [50.8 mm]Bending Moment0.1 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 |
|------------------------------------|------------------|---------------|
| Туре | SMA Male | N Male |
| Specification | MIL-STD-348A | MIL-STD-348A |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Mating Cycles | | 500 |
| Contact Material and Plating | Brass, Gold | Brass, Gold |
| Contact Plating Specification | 50 μin minimum | ASTM B488 |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Nickel | Brass, Nickel |
| Body Plating Specification | 100 μin minimum | QQ-N-290 |
| Coupling Nut Material and Plating | Brass, Nickel | Brass, Nickel |
| Coupling Nut Plating Specification | 100 μin minimum | QQ-N-290 |
| Hex Size | 5/16 inch | |
| Torque | 3 in-lbs 0.34 Nm | |
| Seal Gasket Material | | Silicone |

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.





FMCA100262/0000

Typical Performance Data

How to Order



Example: FMCA100262/0000-12 = 12 inches long cable

FMCA100262/0000-100cm = 100 cm long cable

Low Loss SMA Male to N 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 ondemand.

For additional information on this product, please click the following link: Low Loss SMA Male to N Male Cable LMR-195-UF Coax FMCA100262/0000

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-n-male-cable-lmr-195-uf-coax-fmca100262-0000-p.aspx

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