

FMCA100229

Configuration

· Connector 1: N Female Bulkhead

Connector 2: SMA MaleCable Type: LMR-195-UFCoax Flex Type: Flexible

Features

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

Applications

· General Purpose

· Laboratory Use

Description

The type N female bulkhead to SMA male cable using LMR-195-UF coax, part number FMCA100229, from Fairview Microwave is in-stock and ships same day. This Fairview type N to SMA cable assembly has a female 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 FMCA100229 type N female to SMA male cable assembly operates to 8 MHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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			1.5:1	
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]



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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			3,000	Vrms

Specifications by Frequency

Doub Name box	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
Part Number		Frequency	250	500	1000	2500	5800	MHz	
FMCA100229	Custom Lengths	Insertion Loss (Typ.)	0.068	0.097	0.139	0.226	0.356	dB/ft	
TWCATOUZZ	Available	111361 tiol1 Loss (1 yp.)	0.23	0.32	0.46	0.75	1.17	dB/m	
FMCA100229-12	12 Inch	Insertion Loss (Typ.)	0.27	0.3	0.34	0.43	0.56	dB	0.128
FMCA100229-24	24 Inch	Insertion Loss (Typ.)	0.34	0.4	0.48	0.66	0.92	dB	0.149
FMCA100229-36	36 Inch	Insertion Loss (Typ.)	0.41	0.5	0.62	0.88	1.27	dB	0.17
FMCA100229-60	60 Inch	Insertion Loss (Typ.)	0.54	0.69	0.9	1.33	1.98	dB	0.212
FMCA100229-300	300 Inch	Insertion Loss (Typ.)	1.9	2.63	3.68	5.85	9.1	dB	0.632

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 dBLoss due to Connector 2:0.1 dBBase Weight:0.128 poundsAdditional 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
 0.128 lbs [58.06 g]

Cable

Cable TypeLMR-195-UFImpedance50 OhmsInner Conductor TypeStrandedInner Conductor Material and PlatingCopperDielectric TypeFoam PE

Dielectric Type For 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 Crush10 lbs/in [0.18 Kg/mm]

Tensile Strength 40 lbs [18.14 Kg]



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Connectors

Description	Connector 1	Connector 2
Туре	N Female Bulkhead	SMA Male
Specification		MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Gold	Brass, Gold
Contact Plating Specification		50 μin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Nickel
Body Plating Specification		100 µin minimum
Coupling Nut Material and Plating		Brass, Nickel
Coupling Nut Plating Specification		100 µin minimum
Hex Size		5/16 inch
Torque		3 in-lbs 0.34 Nm

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.

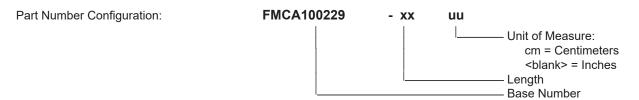




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Typical Performance Data

How to Order



Example: FMCA100229-12 = 12 inches long cable

FMCA100229-100cm = 100 cm long cable

Low Loss N Female Bulkhead to SMA Male Cable LMR-195-UF Coax from Fairview Microwave is in-stock and available to ship sameday. 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 N Female Bulkhead to SMA Male Cable LMR-195-UF Coax FMCA100229

URL: https://www.fairviewmicrowave.com/low-loss-n-female-bulkhead-to-sma-male-cable-lmr-195-uf-coax-fm-ca100229-p.aspx

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