Low Loss 7/16 DIN Female Bulkhead to 7/16 DIN Female Bulkhead Cable LMR-400-UF Coax

FMCA100272

Configuration

- Connector 1: 7/16 DIN Female Bulkhead
- Connector 2: 7/16 DIN Female Bulkhead
- Cable Type: LMR-400-UF
- Coax Flex Type: Flexible

Features

- Max Frequency 3 GHz
- Shielding Effectivity > 90 dB
- 85% Phase Velocity
- Double Shielded
- TPE Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The 7/16 DIN female bulkhead to 7/16 DIN female bulkhead cable using LMR-400-UF coax, part number FMCA100272, from Fairview Microwave is in-stock and ships same day. This Fairview 7/16 DIN to 7/16 DIN cable assembly has a female to female gender configuration with 50 ohm flexible LMR-400-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA100272 7/16 DIN female to 7/16 DIN female cable assembly operates to 3 GHz. Our RF cable assembly with 7/16 DIN 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		3	GHz
VSWR			1.33:1	
Velocity of Propagation		85		%
RF Shielding	90			dB
Group Delay		1.2 [3.94]		ns/ft [ns/m]
Capacitance		23.9 [78.41]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		1.07 [3.51]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.65 [5.41]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Operating Voltage (DC)			2,700	Vdc
Dielectric Withstanding Voltage (DC)			4,000	Vdc
Jacket Spark			8,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	100	250	500	1000	3000	MHz	
FMCA100272	Custom Lengths Available	Insertion Loss (Typ.)	0.015	0.023	0.035	0.5	0.085	dB/ft	
			0.05	0.08	0.12	1.65	0.28	dB/m	
FMCA100272-12	12 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.7	0.29	dB	0.693
FMCA100272-24	24 inch	Insertion Loss (Typ.)	0.23	0.25	0.27	1.2	0.37	dB	0.78
FMCA100272-36	36 inch	Insertion Loss (Typ.)	0.25	0.27	0.31	1.7	0.46	dB	0.867
FMCA100272-60	60 inch	Insertion Loss (Typ.)	0.28	0.32	0.38	2.7	0.63	dB	1.041
FMCA100272-300	300 inch	Insertion Loss (Typ.)	0.58	0.78	1.08	12.7	2.33	dB	2.781

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:	0.693	pounds
Additional Weight per Inch:	0.00725	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.693 lbs [314.34 g]

Cable

Cable Type	LMR-400-UF
Impedance	50 Ohms
Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	TPE, Black
Jacket Diameter	0.405 in [10.29 mm]
One Time Minimum Bend Radius	1 in [25.4 mm]
Repeated Minimum Bend Radius	4 in [101.6 mm]
Bending Moment	0.38 lbs-ft [0.52 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	160 lbs [72.57 Kg]

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Connectors

Description	Connector 1	Connector 2
Type	7/16 DIN Female Bulkhead	7/16 DIN Female Bulkhead
Specification	IEC 61169-4	IEC 61169-4
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Spring Copper, Silver	Spring Copper, Silver
Contact Plating Specification	5 µm minimum	5 µm minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	2 µm minimum	2 µm minimum

Environmental Specifications

Operating Range Temperature	-40 to +85 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **FMCA100272 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100272 — Base Number

Example: FMCA100272-12 = 12 inches long cable
FMCA100272-100cm = 100 cm long cable

Low Loss 7/16 DIN Female Bulkhead to 7/16 DIN Female Bulkhead Cable LMR-400-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 7/16 DIN Female Bulkhead to 7/16 DIN Female Bulkhead Cable LMR-400-UF Coax FMCA100272

URL: https://www.fairviewmicrowave.com/low-loss-7-16-din-female-bulkhead-to-7-16-din-female-bulkhead-cable-lmr-400-uf-coax-fmca100272-p.aspx

FMCA100272 CAD Drawing

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