

## 1.85mm Male to 2.4mm Female Bulkhead Cable FM-SR086TB Coax



#### **FMCA100330**

#### Configuration

· Connector 1: 1.85mm Male

· Connector 2: 2.4mm Female Bulkhead

Cable Type: FM-SR086TBCoax Flex Type: Formable

#### **Features**

Max Frequency 20 GHz

· 69.5% Phase Velocity

#### **Applications**

· General Purpose

· Laboratory Use

#### **Description**

The 1.85mm male to 2.4mm female bulkhead cable using FM-SR086TB coax, part number FMCA100330, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 2.4mm cable assembly has a male to female gender configuration with 50 ohm formable FM-SR086TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA100330 1.85mm male to 2.4mm female cable assembly operates to 20 GHz. Our RF cable assembly with 2.4mm 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.

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		20	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
Capacitance		29 [95.14]		pF/ft [pF/m]
DC Resistance Inner Conductor		65.7 [215.55]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		10.2 [33.46]		Ohms/1000ft [Ohms/Km]

#### Specifications by Frequency



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# 

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	20000	MHz	
FMCA100330	Custom Lengths	Insertion Loss (Typ.)	0.225	0.306	0.508	0.759	1.2	dB/ft	
TWICATOUSSU	Available	insertion Loss (Typ.)	0.74	1.01	1.67	2.5	3.94	dB/m	
FMCA100330-6	6 In	Insertion Loss (Typ.)	0.26	0.31	0.44	0.6	0.88	dB	0.035
FMCA100330-9	9 In	Insertion Loss (Typ.)	0.31	0.39	0.57	0.79	1.18	dB	0.038
FMCA100330-12	12 In	Insertion Loss (Typ.)	0.37	0.47	0.7	0.98	1.48	dB	0.04
FMCA100330-18	18 ln	Insertion Loss (Typ.)	0.48	0.62	0.95	1.36	2.08	dB	0.046
FMCA100330-24	24 In	Insertion Loss (Typ.)	0.59	0.77	1.21	1.74	2.68	dB	0.051

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: 0.04\*SQRT(FGHz) dB
Loss due to Connector 2: 0.1 dB
Base Weight: 0.04 pounds
Additional Weight per Inch: 0.00084 pounds

#### **Mechanical Specifications**

#### **Cable Assembly**

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.04 lbs [18.14 g]

#### Cable

Cable TypeFM-SR086TBImpedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopper Clad Steel, Silver

Dielectric Type PTFE

Number of Shields 1
Outer Conductor 1 Material and Plating Copper, Tin
Repeated Minimum Bend Radius 0.78 in [19.81 mm]



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#### **Connectors**

Description	Connector 1	Connector 2		
Туре	1.85mm Male	2.4mm Female Bulkhead		
Specification		IEEE-STD-P287		
Impedance	50 Ohms	50 Ohms		
Configuration	Straight	Straight		
Mating Cycles	500			
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel		
Contact Plating Specification	50 μin minimum	50 μin minimum		
Dielectric Type	PEI	PEI		
Body Material and Plating	Beryllium Copper, Gold over Nickel	Passivated Stainless Steel		
Body Plating Specification	50 μin minimum	SAE-AMS-2700		
Coupling Nut Material and Plating	Passivated Stainless Steel			
Coupling Nut Plating Specification	ASTM-A582			
Hex Size	5/16 inch			
Torque	8 in-lbs 0.9 Nm			

#### **Environmental Specifications**

Compliance Certifications (see product page for current document)

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

Notes:



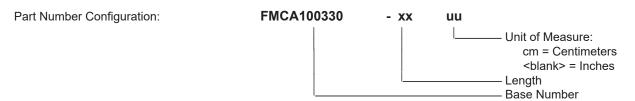
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#### FMCA100330

#### **Typical Performance Data**

#### **How to Order**



Example: FMCA100330-12 = 12 inches long cable FMCA100330-100cm = 100 cm long cable

1.85mm Male to 2.4mm Female Bulkhead Cable FM-SR086TB 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: 1.85mm Male to 2.4mm Female Bulkhead Cable FM-SR086TB Coax FMCA100330

URL: https://www.fairviewmicrowave.com/1.85mm-male-to-2.4mm-female-bulkhead-cable-fm-sr086tb-coax-fmca100330-p.aspx

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