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



FMCA100327

Configuration

- Connector 1: 1.85mm Male
- Connector 2: 1.85mm Female Bulkhead
- Cable Type: FM-SR086TB
- Coax Flex Type: Formable

Features

- Max Frequency 20 GHz
- 69.5% Phase Velocity

Applications

- General Purpose
- Laboratory Use

Description

The 1.85mm male to 1.85mm female bulkhead cable using FM-SR086TB coax, part number FMCA100327, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 1.85mm 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 FMCA100327 1.85mm male to 1.85mm female cable assembly operates to 20 GHz. Our RF cable assembly with 1.85mm 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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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	1000	2000	4500	9000	20000	MHz	
FMCA100327	Custom Lengths Available	Insertion Loss (Typ.)	0.225	0.306	0.508	0.759	1.2	dB/ft	
			0.74	1.01	1.67	2.5	3.94	dB/m	
FMCA100327-6	6 In	Insertion Loss (Typ.)	0.26	0.31	0.44	0.6	0.88	dB	0.035
FMCA100327-9	9 In	Insertion Loss (Typ.)	0.31	0.39	0.57	0.79	1.18	dB	0.038
FMCA100327-12	12 In	Insertion Loss (Typ.)	0.37	0.47	0.7	0.98	1.48	dB	0.04
FMCA100327-18	18 In	Insertion Loss (Typ.)	0.48	0.62	0.95	1.36	2.08	dB	0.046
FMCA100327-24	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 Type	FM-SR086TB
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper 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
Type	1.85mm Male	1.85mm 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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FMCA100327

Typical Performance Data

How to Order

Part Number Configuration: **FMCA100327 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100327 — Base Number

Example: FMCA100327-12 = 12 inches long cable
FMCA100327-100cm = 100 cm long cable

1.85mm Male to 1.85mm Female Bulkhead Cable FM-SR086TB 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: 1.85mm Male to 1.85mm Female Bulkhead Cable FM-SR086TB Coax FMCA100327

URL: https://www.fairviewmicrowave.com/1.85mm-male-to-1.85mm-female-bulkhead-cable-fm-sr086tb-coax-fm-ca100327-p.aspx

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FMCA100327 CAD Drawing

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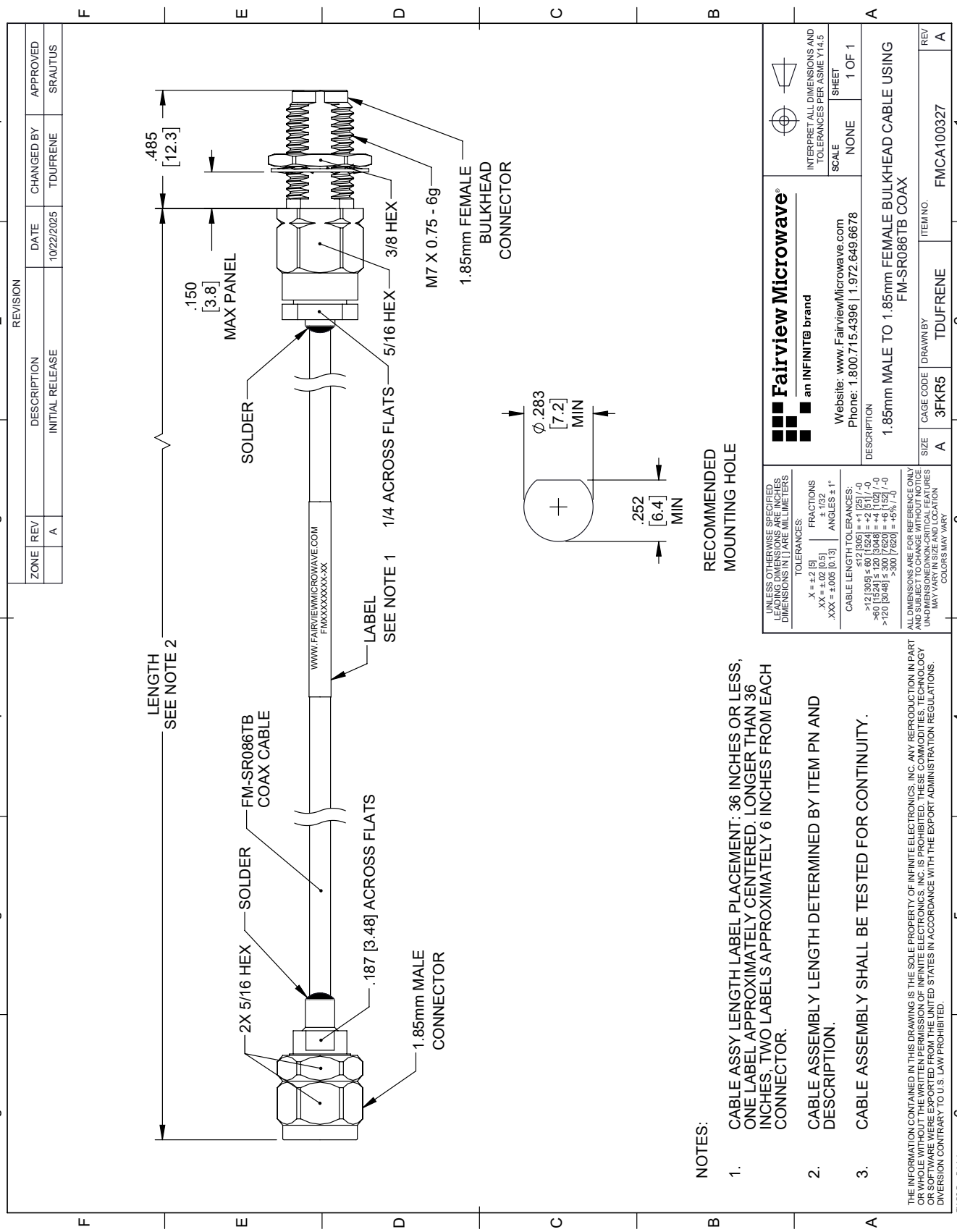

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