1.85mm Male to SSMC Plug Cable FM-SR086TBJ Coax



FMCA100354

Configuration

- Connector 1: 1.85mm Male
- Connector 2: SSMC Plug
- Cable Type: FM-SR086TBJ
- Coax Flex Type: Formable

Features

- Max Frequency 12.4 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket
- 500 Mating Cycles

Applications

- General Purpose
- Laboratory Use

Description

The 1.85mm male to SSMC plug cable using FM-SR086TBJ coax, part number FMCA100354, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to SSMC cable assembly has a male to plug gender configuration with 50 ohm formable FM-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable. The FMCA100354 1.85mm male to SSMC plug cable assembly operates to 12.4 GHz.

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		12.4	GHz
VSWR			1.4:1	
Velocity of Propagation		69.5		%
RF Shielding	100			dB
Group Delay		1.43 [4.69]		ns/ft [ns/m]
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]
Operating Voltage (AC)			250	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	500	1000	2500	5000	12400	MHz	
FMCA100354	Custom Lengths Available	Insertion Loss (Typ.)	0.15	0.225	0.346	0.549	0.905	dB/ft	
			0.5	0.74	1.14	1.81	2.97	dB/m	
FMCA100354-6	6 In	Insertion Loss (Typ.)	0.21	0.26	0.34	0.47	0.7	dB	0.03
FMCA100354-9	9 In	Insertion Loss (Typ.)	0.25	0.31	0.43	0.61	0.92	dB	0.035
FMCA100354-12	12 In	Insertion Loss (Typ.)	0.28	0.37	0.51	0.74	1.15	dB	0.04
FMCA100354-18	18 In	Insertion Loss (Typ.)	0.36	0.48	0.69	1.02	1.6	dB	0.051
FMCA100354-24	24 In	Insertion Loss (Typ.)	0.43	0.59	0.86	1.29	2.06	dB	0.061

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:	0.00167	pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.5 in [12.7 mm]
Weight	0.04 lbs [18.14 g]

Cable

Cable Type	FM-SR086TBJ
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	Tinned Copper Composite Braid
Jacket Material	FEP, Black
Jacket Diameter	0.105 in [2.67 mm]
One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	0.787 in [19.99 mm]

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Connectors

Description	Connector 1	Connector 2
Type	1.85mm Male	SSMC Plug
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold
Contact Plating Specification	50 µin minimum	MIL-G-45204
Dielectric Type	PEI	Teflon
Body Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold
Body Plating Specification	50 µin minimum	MIL-G-45204
Coupling Nut Material and Plating	Passivated Stainless Steel	Beryllium Copper, Gold
Coupling Nut Plating Specification	ASTM-A582	MIL-G-45204
Hex Size	5/16 inch	
Torque	8 in-lbs 0.9 Nm	1.75 in-lbs 0.2 Nm

Environmental Specifications

Operating Range Temperature	-55 to +125 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: **FMCA100354 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA100354 — Base Number

Example: FMCA100354-12 = 12 inches long cable
FMCA100354-100cm = 100 cm long cable

1.85mm Male to SSMC Plug Cable FM-SR086TBJ 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 SSMC Plug Cable FM-SR086TBJ Coax FMCA100354

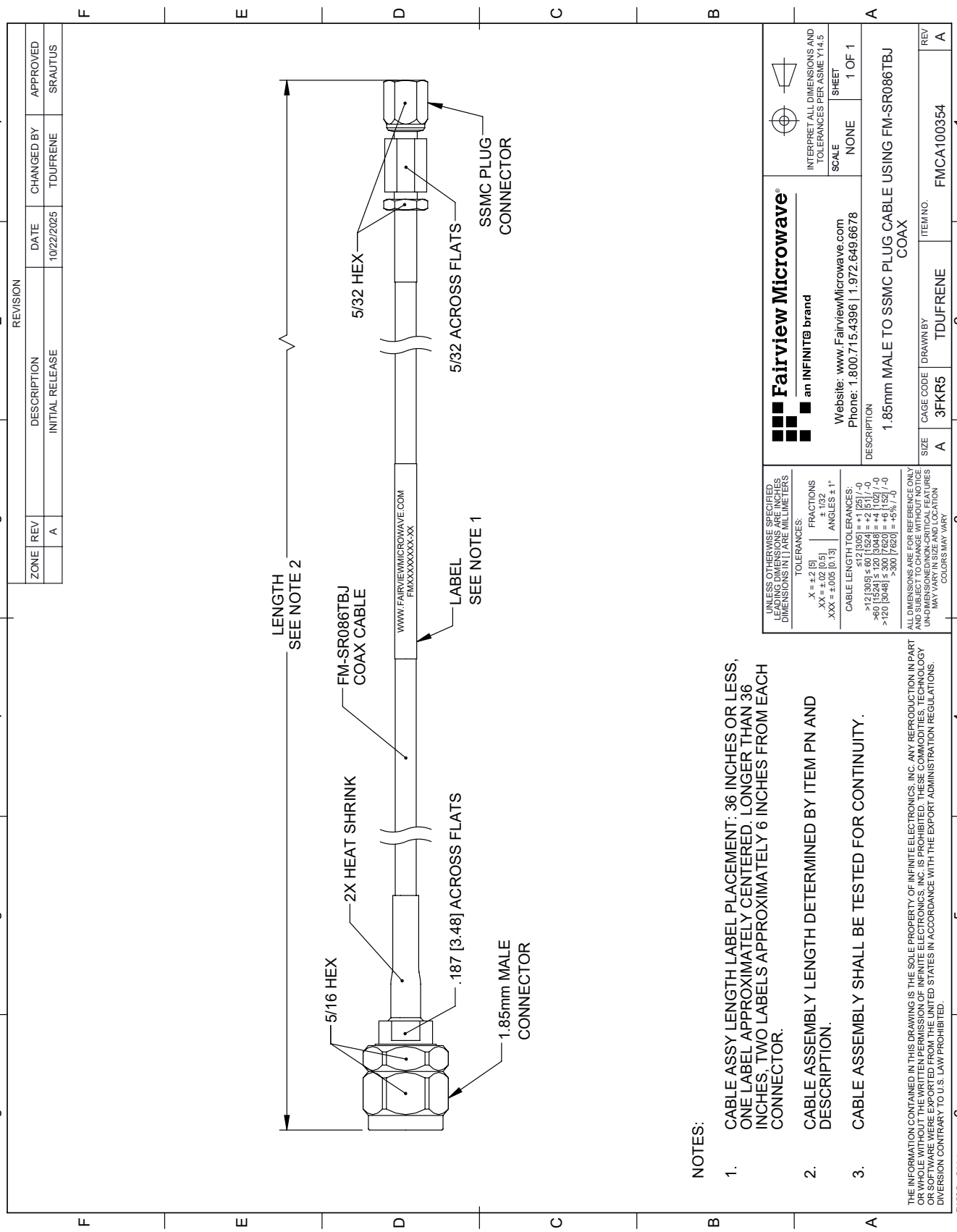
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FMCA100354 CAD Drawing

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