

# FMCA2116 DATA SHEET

# SMA Male to SMA Male Cable FM-SR086TBJ Coax

The SMA male to SMA male cable using FM-SR086TBJ coax, part number FMCA2116, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male 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 FMCA2116 SMA male to SMA male cable assembly operates to 18 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		Min	Т	ур	Мах	l	Units
Frequency Range		DC			18		GHz
VSWR					1.4:1		
Velocity of Propagation			6	9.5			%
RF Shielding		100					dB
Group Delay			1.43	[4.69]		ns/i	ft [ns/m]
Capacitance			29 [	95.14]		pF/1	ft [pF/m]
DC Resistance Inner Cor	ductor		65.7 [	215.55	]	Ω/100	)0ft [Ω/Km]
DC Resistance Outer Cor	nductor		10.2	[33.46]		Ω/100	)0ft [Ω/Km]

#### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.22	0.3	0.51	0.76	1.12	dB
	0.72	0.98	1.67	2.49	3.67	

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

## **Mechanical Specifications**

**Cable Assembly** Length\* Diameter

#### Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type 0 in [0 mm] 0.315 in [8 mm]

FM-SR086TBJ 50 Ohms Solid Copper Clad Steel, Silver PTFE



# **Configuration:**

- SMA Male
- SMA Male
- FM-SR086TBJ

## **Features:**

- Max Frequency 18 GHz
- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- FEP Jacket
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding >100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

# **Applications:**

- General Purpose
- Laboratory Use

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com Fairview Microwave

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Outer Conductor Material and Plating	
Jacket Material	
Jacket Diameter	

One Time Minimum Bend Radius Repeated Minimum Bend Radius 0.105 in [2.67 mm] 0.5 in [12.7 mm] 0.787 in [19.99 mm]

FEP, Black

Tinned Copper Composite Braid

#### Connectors

Description	Connector 1	Connector 2	
Туре	SMA Male	SMA Male	
Impedance	50 Ohms	50 Ohms	
Contact Material & Plating	Brass, Gold over Nickel	Brass, Gold over Nickel	
Dielectric Type	PTFE	PTFE	
Body Material & Plating	Brass, Gold over Nickel	Brass, Gold over Nickel	
Coupling Nut Material & Pla	ting Passivated Stainless Stee	Passivated Stainless Steel	
Hex Size	5/16 inch	5/16 inch	
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm	

Mechanical Specification Notes:

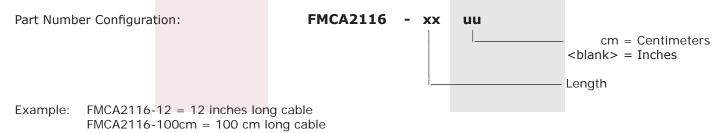
\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8''$ , whichever is greater.

**Compliance Certifications** (see product page for current document)

## **Plotted and Other Data**

- Notes:
- Values at 25°C, sea level.

## How to Order



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SMA Male to SMA Male Cable FM-SR086TBJ Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: SMA Male to SMA Male Cable FM-SR086TBJ Coax FMCA2116

The information contained in this document is accurate to the best of our knowledge and representative of the part

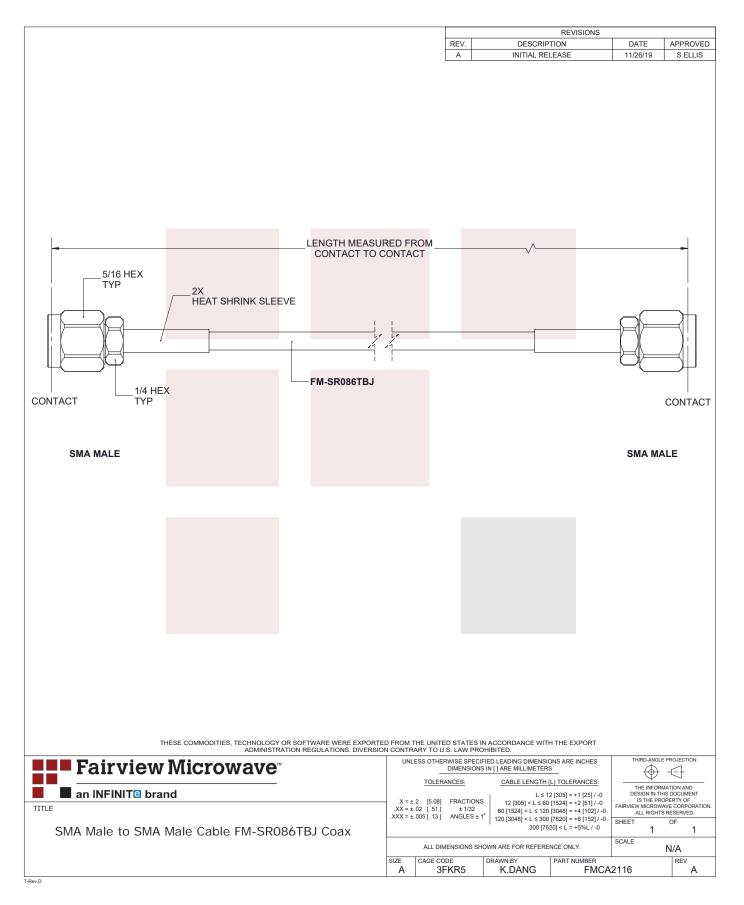
URL: https://www.fairviewmicrowave.com/sma-male-sma-male-cable-fm-sr086tbj-coax-fmca2116-p.aspx

described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warraty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

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