

## FMCA2116-18 DATA SHEET

# SMA Male to SMA Male Cable FM-SR086TBJ Coax in 18 Inch

The SMA male to SMA male 18 inch cable using FM-SR086TBJ coax, part number FMCA2116-18, 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 FMCA2116-18 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	Mi	n	Т	ур	Max	ι	Inits
Frequency Range	DC	;			18		GHz
VSWR					1.4:1		
Velocity of Propagation			6	9.5			%
RF Shielding	100	)					dB
Group Delay		1.4	43	[4.69]		ns/f	t [ns/m]
Capacitance		29	) [9	95.14]		pF/f	t [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.)	0.54	0.66	0.96	1.34	1.88	dB

## Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

## **Mechanical Specifications**

#### **Cable Assembly**

Length\* 18 in [457.2 mm]
Diameter 0.315 in [8 mm]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type

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 hend
- 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





Outer Conductor Material and Plating

Jacket Material Jacket Diameter Tinned Copper Composite Braid

FEP, Black

0.105 in [2.67 mm]

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

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold over Nick	el Brass, Gold over Nickel
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold over Nick	el Brass, Gold over Nickel
Coupling Nut Material & Pla	ting Passivated Stainless St	eel 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:

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

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

Notes:

Values at 25°C, sea level.

#### **How to Order**

Part Number Configuration:

FMCA2116 - xx uu | cm = Centimeters | chank> = Inches | Length

Example: FMCA2116-12 = 12 inches long cable FMCA2116-100cm = 100 cm long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

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





SMA Male to SMA Male Cable FM-SR086TBJ Coax in 18 Inch 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 in 18 Inch FMCA2116-18

URL: https://www.fairviewmicrowave.com/sma-male-sma-male-cable-fm-sr086tbj-coax-fmca2116-18-p.aspx







