

# FMCA2114-18 DATA SHEET

# SMA Female Bulkhead to SMA Male Cable FM-SR141TB Coax in 18 Inch

The SMA female bulkhead to SMA male 18 inch cable using FM-SR141TB coax, part number FMCA2114-18, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a female to male gender configuration with 50 ohm formable FM-SR141TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semirigid assemblies since they are hand formable. The FMCA2114-18 SMA female to SMA male cable assembly operates to 18 GHz. Our RF cable assembly with SMA 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	Min	Т	ур	Max	ι	Jnits
Frequency Range	DC			18		GHz
VSWR				1.4:1		
Velocity of Propagation		69	9.5			%
RF Shielding	110					dB
Capacitance	29 [95.14]			pF/ft [pF/m]		
DC Resistance Inner Con	7.8 [25.59]			Ω/1000ft [Ω/Km]		
DC Resistance Outer Conductor			5.5 [18.04] Ω/1000ft			)Oft [Ω/Km]

# **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.38	0.44	0.6	0.83	1.17	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 0.433 in [11 mm]

#### Cable

Cable Type FM-SR141TB
Impedance 50 Ohms
Inner Conductor Type Solid
Inner Conductor Material and Plating Copper, Silver



# **Configuration:**

- SMA Female Bulkhead
- SMA Male
- FM-SR141TB

## Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 110 dB
- 69.5% Phase Velocity
- 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

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Dielectric Type

PTFE

Outer Conductor Material and Plating

Tinned Copper Composite Braid

Repeated Minimum Bend Radius

0.625 in [15.88 mm]

#### **Connectors**

Description	Connector	r 1		Connector 2			
Туре	SMA Fema	ıle	SMA Male				
Mount Method	Bulkhead	d					
Impedance	50 Ohms	5	50 Ohms				
Contact Material & Plating	Beryllium Copper, Gold over Nickel						
Dielectric Type	PTFE						
Body Material & Plating	Brass, Gold over	· Nic	kel	Brass, Gold ove	r Nick	el	
Coupling Nut Material & Pla	iting			Passivated Stainl	ess St	eel	
Hex Size				5/16 inc	h		
Torque				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:

FMCA2114 - xx

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cm = Centimeters
<br/>
<br/>
<br/>
clank> = Inches

Length

Example: FMCA2114-12 = 12 inches long cable
 FMCA2114-100cm = 100 cm long cable

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





SMA Female Bulkhead to SMA Male Cable FM-SR141TB 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 Female Bulkhead to SMA Male Cable FM-SR141TB Coax in 18 Inch FMCA2114-18

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order

URL: https://www.fairviewmicrowave.com/sma-female-sma-male-cable-fm-sr141tb-coax-fmca2114-18-p.aspx

to implem	ent improver	nents. Fairview	Microw	ave reserve	es the righ	nt to mak	e such	changes	as requ	ired. Unle	ss oth	nerwise
		s are nominal.										
suitability	of the part of	lescribed hereir	for any	y particular	purpose,	and Fair	view M	icrowave	does n	ot assume	any I	liability
arising out	t of the use o	of any part or do	ocument	tation.								





