

# FMCA2149-18 DATA SHEET

# SMA Female 2 Hole Flange to RA SMP Female Cable FM-SR086TBJ Coax in 18 Inch

The SMA female 2 hole flange to RA SMP female 18 inch cable using FM-SR086TBJ coax, part number FMCA2149-18, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMP cable assembly has a female to female gender configuration with 50 ohm formable FM-SR086TBJ coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semirigid assemblies since they are hand formable. The FMCA2149-18 SMA female to SMP female cable assembly operates to 10 GHz. The right angle SMP interface on the FM-SR086TBJ cable allows for easier connections in tight spaces. Our RF cable assembly with SMA 2 hole flange 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			10		GHz
VSWR				1.4:1		
Velocity of Propagation		6	9.5			%
RF Shielding	100					dB
Group Delay		1.43	[4.69]		ns/f	t [ns/m]
Capacitance		29 [9	95.14]		pF/f	t [pF/m]
DC Resistance Inner Cor	nductor	65.7 [	215.55	]	Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	nductor	10.2	[33.46]		Ω/100	Oft [Ω/Km]

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	10	GHz
Insertion Loss (Typ.)	0.525	0.637	0.819	1.123	1.518	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 0.2 dB per connector.

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 18 in [457.2 mm] Diameter 0.25 in [6.35 mm]

Cable

Cable Type FM-SR086TBJ



### **Configuration:**

- SMA Female 2 Hole Flange
- SMP Female Right Angle
- FM-SR086TBJ

#### **Features:**

- Max Frequency 10 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

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Impedance50 OhmsInner Conductor TypeSolid

Inner Conductor Material and Plating Copper Clad Steel, Silver

Dielectric Type PTFE

Outer Conductor Material and Plating

Tinned Copper Composite Braid

Jacket MaterialFEP, BlackJacket Diameter0.105 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]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Female	SMP Female
Mount Method	2 Hole Flange	
Specification	MIL-STD-348	DESC 94008
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material & Plating	Stainless Steel, Gold	d Beryllium Copper, Gold
Body Plating Spec.	MIL-G-45204	MIL-G-45204

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:

FMCA2149 - xx uu cm = Centimeters <br/>
<br/>
<br/>
<br/>
cm = Centimeters <br/>
<br/>
<br/>
Length

Example: FMCA2149-12 = 12 inches long cable

FMCA2149-100cm = 100 cm long cable

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





SMA Female 2 Hole Flange to RA SMP Female 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 Female 2 Hole Flange to RA SMP Female Cable FM-SR086TBJ Coax in 18 Inch FMCA2149-18

URL: https://www.fairviewmicrowave.com/sma-female-ra-smp-female-cable-fm-sr086tbj-coax-fmca2149-18-p.aspx







