

## SMA Female 2 Hole Flange to RA SMP Female Cable FM-SR086TBJ Coax in 48 Inch

The SMA female 2 hole flange to RA SMP female 48 inch cable using FM-SR086TBJ coax, part number FMCA2149-48, 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 semi-rigid assemblies since they are hand formable. The FMCA2149-48 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	Typ	Max	Units
Frequency Range	DC		10	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]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
DC Resistance Outer Conductor		10.2 [33.46]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	10	GHz
Insertion Loss (Typ.)	0.9	1.199	1.685	2.496	3.547	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\* 48 in [121.92 cm]  
 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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Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Steel, Silver
Dielectric Type	PTFE
Outer Conductor 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]

### Connectors

Description	Connector 1	Connector 2
Type	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, Gold	Beryllium Copper, Gold
Contact Plating Spec.	MIL-G-45204	MIL-G-45204
Dielectric Type	PTFE	PTFE
Body Material & Plating	Stainless Steel, Gold	Beryllium Copper, Gold
Body Plating Spec.	MIL-G-45204	MIL-G-45204

#### 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

Part Number Configuration:

**FMCA2149 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMCA2149-12 = 12 inches long cable  
 FMCA2149-100cm = 100 cm long cable

SMA Female 2 Hole Flange to RA SMP Female Cable FM-SR086TBJ Coax in 48 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.

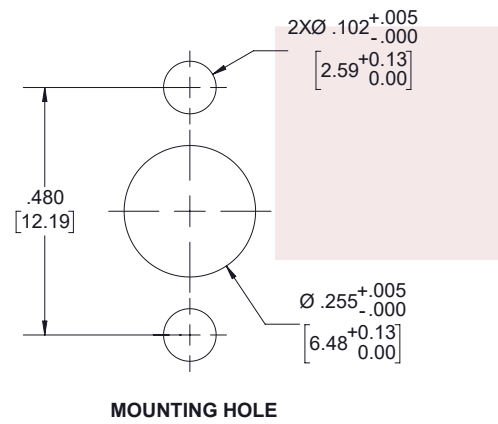
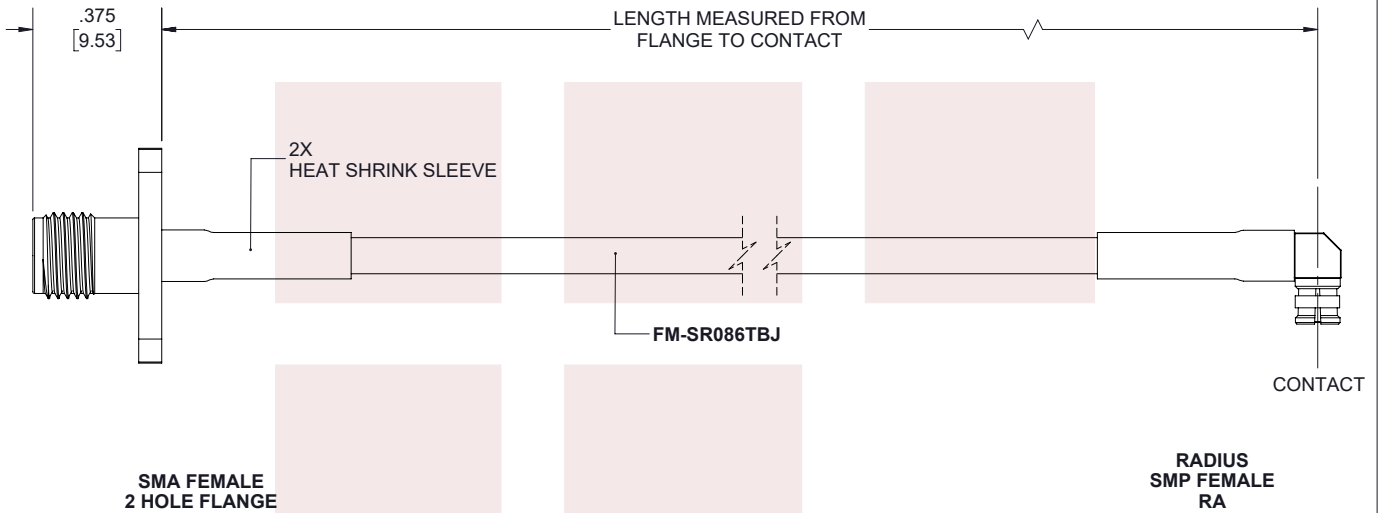
Click the following link to obtain additional part information: [SMA Female 2 Hole Flange to RA SMP Female Cable FM-SR086TBJ Coax in 48 Inch FMCA2149-48](https://www.fairviewmicrowave.com/sma-female-ra-smp-female-cable-fm-sr086tbj-coax-fmca2149-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/sma-female-ra-smp-female-cable-fm-sr086tbj-coax-fmca2149-48-p.aspx>

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 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 warranty 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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/27/19	S.ELLIS



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TITLE  
SMA Female 2 Hole Flange to RA SMP Female Cable  
FM-SR086TBJ Coax in 48 Inch

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: FRACTIONS CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [ .51]	ANGLES ± 1°	12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [ .13]		60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE N/A

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	PART NUMBER FMCA2149	REV A
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