

# FMCA2018 DATA SHEET

# Fire Rated Low PIM 4.3-10 Female to 4.3-10 Female Cable SPF-250 Coax Using Times Microwave Parts

The 4.3-10 female to 4.3-10 female cable using SPF-250 coax, part number FMCA2018, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a female to female gender configuration with 50 ohm corrugated SPF-250 coax. Fairview Microwave's corrugated RF cable assemblies are ideal for applications where durability and high power are needed. Our low PIM design offers excellent passive intermodulation performance with PIM levels better than -160 dBc. The FMCA2018 4.3-10 female to 4.3-10 female cable assembly operates to 5.8 GHz. Times Microwave cable is used in each assembly and TMS components are used to form connections with the super flexible low PIM cable. These cable assemblies are expertly built to satisfy your specific need with high quality Times Microwave Systems manufactured parts.

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	5.8		GHz		
VSWR				1.4:1		
Velocity of Propagation		8	33		%	
Passive Intermodulation		-165		-160	dBc	
Capacitance		24 [78.74]		pF/ft [pF/m]		
Inductance		0.054 [0.18]		uH/ft [uH/m]		

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max	a) 0.041	0.051	0.062	0.103	0.167	dB/ft
	0.13	0.17	0.2	0.34	0.55	dB/m

**Electrical Specification Notes:** 

PIM test results vary between cables

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1\*SQRT(FGHz) dB per connector.

#### **Mechanical Specifications**

**Cable Assembly** 

Length\* 0 in [0 mm]

Cable

Cable Type SPF-250 Impedance 50 Ohms



# **Configuration:**

- 4.3-10 Female
- TC-SPP250-4310F-LP
- 4.3-10 Female
- TC-SPP250-4310F-LP
- SPF-250

#### Features:

- Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- 83% Phase Velocity
- FRPE Jacket
- 100% Tested with PIM Test Results Marked on Cable
- Lightweight and Extremely Flexible
- Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

# **Applications:**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

# **Cable Diagram:**

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





Inner Conductor Type

Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1

Outer Conductor Material and Plating

Jacket Material Jacket Diameter

Jacket Diameter

One Time Minimum Bend Radius Bending Moment

Solid

Copper Clad Aluminum

Foam PE

1

Helically Corrugated Copper Tube

Copper FRPE, Black

0.303 in [7.7 mm]

1.25 in [31.75 mm] 0.5 lbs-ft [0.68 N-m]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	4.3-10 Female	4.3-10 Female
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Phosphor Bronze, Sil	ver Phosphor Bronze, Silver
Contact Plating Spec.	200 μin	200 μin
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plati	ng Brass, Tri-Metal	Brass, Tri-Metal
Outer Cond Plating Spec.	80 µin	80 μin
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	80 μin	80 μin

# **Environmental Specifications**

**Temperature** 

Operating Range -55 to +200 deg C Storage Range -55 to +200 deg C

Environmental Specification Notes:

CMR (Riser) Fire Rated

**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:

Example: FMCA2018-12 = 12 inches long cable

FMCA2018-100cm = 100 cm long cable

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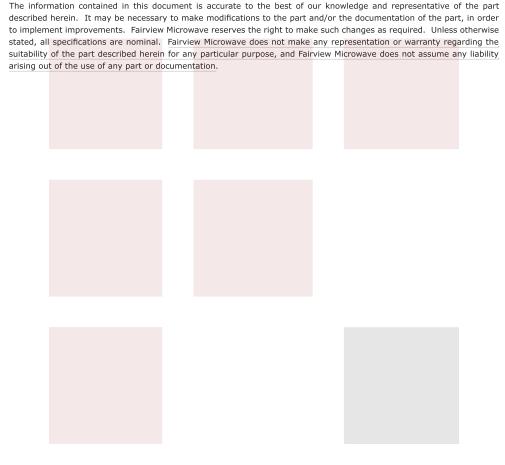




Fire Rated Low PIM 4.3-10 Female to 4.3-10 Female Cable SPF-250 Coax Using Times Microwave Parts from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Fire Rated Low PIM 4.3-10 Female to 4.3-10 Female Cable SPF-250 Coax Using Times Microwave Parts FMCA2018

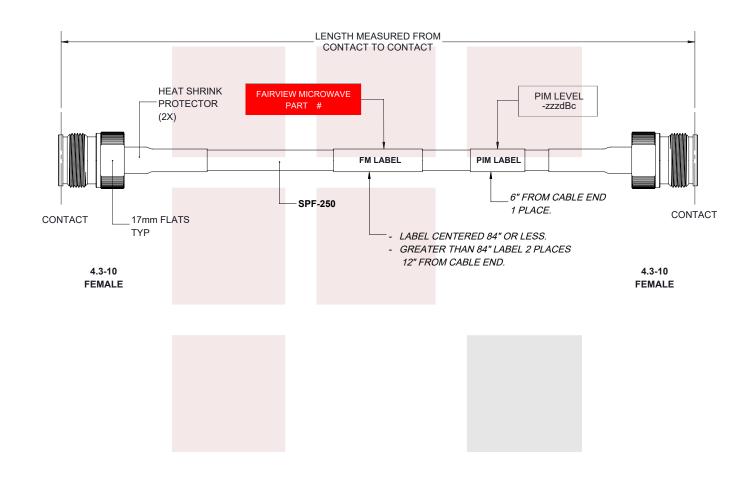
URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-female-4.3-10-female-cable-spf250-coax-fmca2018-p.aspx



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STANDARD TOLERANCES

.X ±0.2 .XX ±0.01 .XXX ±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

Fairview Microwave an INFINIT® brand	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].						
Fire Rated Low PIM 4.3-10 Female to 4.3-10 Female Cable SPF-250 Coax Using Times Microwave Parts	DWG NO FMCA2018				CAGE CODE 3FKR5		
	CAD FILE 06/05/19	SHEET	1 OF 1	SCAL	E N/A	SIZE A	7361