

## Fire Rated Low PIM 4.3-10 Female to N Male Cable SPF-250 Coax in 100 cm Using Times Microwave Parts

The 4.3-10 female to type N male 100 cm cable using SPF-250 coax, part number FMCA2021-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to type N cable assembly has a female to male 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 FMCA2021-100CM 4.3-10 female to type N male 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		83		%
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.)	0.27	0.34	0.41	0.66	1.03	dB

#### Electrical Specification Notes:

PIM test results vary between cables

The Insertion Loss data above is based on the performance specifications of the coax used in this assembly. The Insertion Loss includes an estimated insertion loss of  $0.1 * \text{SQRT}(F\text{GHz})$  dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length\* 39.37 in [100 cm]

#### Cable

Cable Type SPF-250  
Impedance 50 Ohms



### Configuration:

- 4.3-10 Female
- TC-SPP250-4310F-LP
- N Male
- TC-250-NM-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:

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Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper Clad Aluminum
Dielectric Type	Foam PE
Number of Shields	1
Shield Layer 1	Helically Corrugated Copper Tube
Outer Conductor Material and Plating	Copper
Jacket Material	FRPE, Black
Jacket Diameter	0.303 in [7.7 mm]
One Time Minimum Bend Radius	1.25 in [31.75 mm]
Bending Moment	0.5 lbs-ft [0.68 N-m]

**Connectors**

Description	Connector 1	Connector 2
Type	4.3-10 Female	N Male
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Spec.	200 $\mu$ in	200 $\mu$ in
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Tri-Metal	
Outer Cond Plating Spec.	80 $\mu$ in	
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	80 $\mu$ in	80 $\mu$ in
Coupling Nut Material & Plating		Brass, Tri-Metal
Coupling Nut Plating Spec.		80 $\mu$ in
Torque		9.74 in-lbs 1.1 Nm

**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)

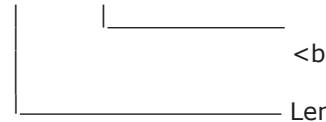
**Plotted and Other Data**

## Notes:

- Values at 25°C, sea level.

**How to Order**

Part Number Configuration:

**FMCA2021 - xx uu**

 cm = Centimeters  
 <blank> = Inches  
 Length

 Example: FMCA2021-12 = 12 inches long cable  
 FMCA2021-100cm = 100 cm long cable

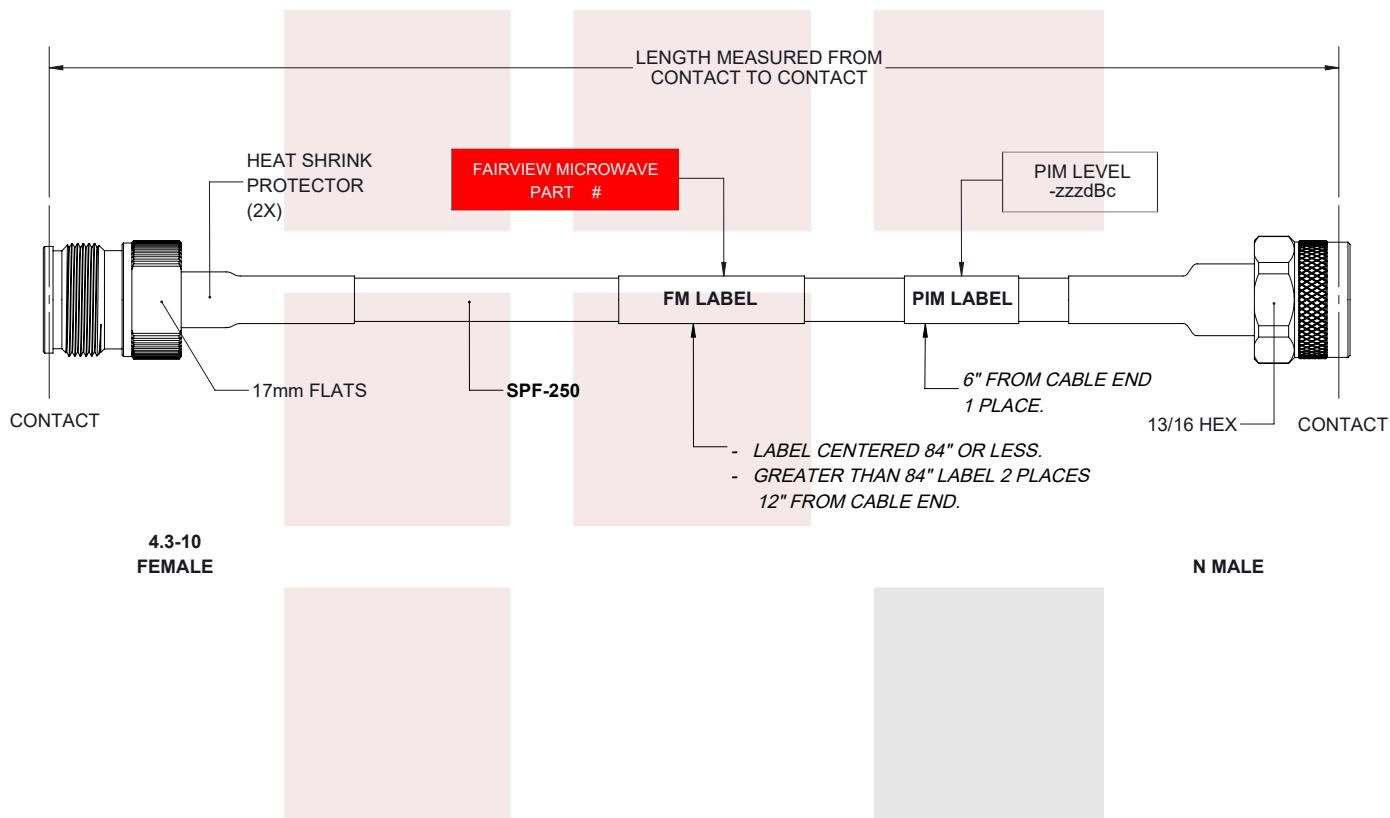
Fire Rated Low PIM 4.3-10 Female to N Male Cable SPF-250 Coax in 100 cm Using Times Microwave Parts from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Fire Rated Low PIM 4.3-10 Female to N Male Cable SPF-250 Coax in 100 cm Using Times Microwave Parts FMCA2021-100CM](#)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-female-n-male-cable-spf250-coax-fmca2021-100cm-p.aspx>

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TITLE  Fire Rated Low PIM 4.3-10 Female to N Male Cable SPF-250 Coax in 100 cm Using Times Microwave Parts		DWG NO <b>FMCA2021</b>			
		CAD FILE	06/05/19	SHEET	1 OF 1
		SCALE	N/A	SIZE	A 7361