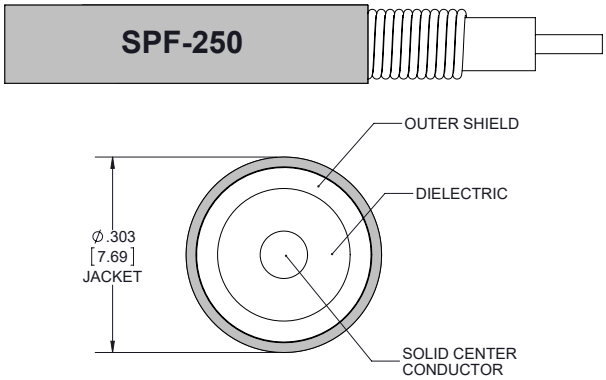
Fire Rated Low PIM RA 4.3-10 Male to 4.3-10 Female Cable SPF-250 Coax in 60 Inch Using Times Microwave Parts

FMCA2019-60

Configuration

- Connector 1: 4.3-10 Male Right Angle TC-250-4310M-RA-LP
- Connector 2: 4.3-10 Female TC-SPP250-4310F-LP
- Cable Type: SPF-250
- Coax Flex Type: Corrugated



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

Description

The RA 4.3-10 male to 4.3-10 female 60 inch cable using SPF-250 coax, part number FMCA2019-60, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 4.3-10 cable assembly has a male 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 FMCA2019-60 4.3-10 male to 4.3-10 female cable assembly operates to 5.8 GHz. The right angle 4.3-10 interface on the SPF-250 cable allows for easier connections in tight spaces. 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz		-165	-160	dBc

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Capacitance		24 [78.74]		pF/ft [pF/m]
Inductance		0.054 [0.18]		uH/ft [uH/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.34	0.43	0.52	0.84	1.32	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*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Length	60 in [152.4 cm]
Width/Diameter	.78 in [19.81 mm]

Cable

Cable Type	SPF-250
Impedance	50 Ohms
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 1 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]

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Connectors

Description	Connector 1	Connector 2
Type	4.3-10 Male Right Angle	4.3-10 Female
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Straight
Contact Material and Plating	Brass, Silver	Phosphor Bronze, Silver
Contact Plating Specification	200 µin	200 µin
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating		Brass, Tri-Metal
Outer Conductor Plating Specification		80 µin
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	80 µin	80 µin
Coupling Nut Material and Plating	Brass, Nickel	
Coupling Nut Plating Specification	200 µin	
Torque	15.05 in-lbs 1.7 Nm	

Environmental Specifications

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

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Typical Performance Data

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How to Order

Part Number Configuration: **FMCA2019 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMCA2019 — Base Number

Example: FMCA2019-12 = 12 inches long cable
FMCA2019-100cm = 100 cm long cable

Fire Rated Low PIM RA 4.3-10 Male to 4.3-10 Female Cable SPF-250 Coax in 60 Inch Using Times Microwave Parts from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Fire Rated Low PIM RA 4.3-10 Male to 4.3-10 Female Cable SPF-250 Coax in 60 Inch Using Times Microwave Parts FMCA2019-60

URL: https://www.fairviewmicrowave.com/low-pim-ra-4.3-10-male-4.3-10-female-cable-spf250-coax-fmca2019-60-p.aspx

FMCA2019-60 CAD Drawing

Fire Rated Low PIM RA 4.3-10 Male to 4.3-10 Female Cable
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