

# FMCA2007-150CM

# Configuration

Connector 1: 4.3-10 Female TC-SPP250-4310F-LP

• Connector 2: N Male Right Angle TC-SPO250-NM-RA-LP

• Cable Type: SPO-250

· Coax Flex Type: Corrugated

## **Features**

- Max Frequency 5.8 GHz
- · Low PIM: -160 dBc Max
- 83% Phase Velocity
- · PE 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

# SPO-250 OUTER SHIELD OJACKET SOLID CENTER CONDUCTOR

# **Applications**

- · General Purpose
- · Laboratory Use

- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Multi-Carrier Communication Systems
- PIM Testing

# **Description**

The 4.3-10 female to RA type N male 150 cm cable using SPO-250 coax, part number FMCA2007-150CM, 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 SPO-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 FMCA2007-150CM 4.3-10 female to type N male cable assembly operates to 5.8 GHz. The right angle type N interface on the SPO-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		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				





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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	0.42	0.51	0.83	1.31	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 59.05 in [149.99 cm] Width/Diameter .94 in [23.88 mm]

Cable

Cable Type SPO-250 Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating

Copper Clad Aluminum Dielectric Type Foam PE Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube

Outer Conductor 1 Material and Plating Copper Jacket Material PE, 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]



# FMCA2007-150CM

# **Connectors**

Description	Connector 1	Connector 2
Туре	4.3-10 Female	N Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Phosphor Bronze, Silver	Brass, 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, Tri-Metal
Coupling Nut Plating Specification		80 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

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** 

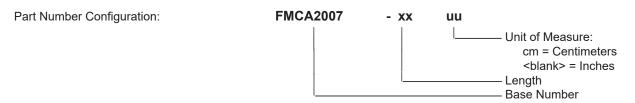






# FMCA2007-150CM

# **How to Order**



Example: FMCA2007-12 = 12 inches long cable

FMCA2007-100cm = 100 cm long cable

Outdoor Rated Low PIM 4.3-10 Female to RA N Male Cable SPO-250 Coax in 150 cm 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: Outdoor Rated Low PIM 4.3-10 Female to RA N Male Cable SPO-250 Coax in 150 cm Using Times Microwave Parts FMCA2007-150CM

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-female-ra-n-male-cable-spo250-coax-fmca2007-150cm-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

# FMCA2007-150CM CAD Drawing

Outdoor Rated Low PIM 4.3-10 Female to RA N Male Cable SPO-250 Coax in 150 cm Using Times Microwave Parts

