

# Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

### **FMCA1848**

### Configuration

- Connector 1: Snap-On 4.3-10 Male TC-SPP250-4310MS-LP
- Connector 2: Snap-On 4.3-10 Male TC-SPP250-4310MS-LP
- Cable Type: SPP-250-LLPL
- · Coax Flex Type: Corrugated

### **Features**

- · Max Frequency 5.8 GHz
- Low PIM: -160 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- 100% Tested with PIM Test Results Marked on Cable
- · UL910 Plenum Rated Cable
- · Lightweight and Extremely Flexible
- · Low Loss with Excellent VSWR
- IP67 (when mated)
- Using Times Microwave Components

# SPP-250-LLPL OUTER SHIELD OUTER SHIELD OUTER SHIELD SOLID CENTER

### **Applications**

- · General Purpose
- Laboratory Use
- · Low PIM Applications

- Distributed Antenna Systems (DAS)
- · Plenum Installations
- Multi-Carrier Communication Systems

### PIM Testing

### Description

The 4.3-10 male snap-on to 4.3-10 male snap-on cable using SPP-250-LLPL coax, part number FMCA1848, 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 male gender configuration with 50 ohm corrugated SPP-250-LLPL 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 FMCA1848 4.3-10 male to 4.3-10 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%



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### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
RF Shielding	100			dB
Passive Intermodulation		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
Capacitance		27 [88.58]		pF/ft [pF/m]
Inductance		0.067 [0.22]		uH/ft [uH/m]
DC Resistance Inner Conductor		3 [9.84]		Ohms/1000ft [Ohms/Km]

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	0.7	1	2.5	5.8	GHz
Insertion Loss (Max.)	0.038	0.048	0.057	0.094	0.148	dB/ft
	0.12	0.16	0.19	0.31	0.49	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] Width/Diameter .99 in [25.15 mm]

Cable

Cable Type SPP-250-LLPL Impedance 50 Ohms

Inner Conductor Type Solid Inner Conductor Material and Plating Copper Dielectric Type **PTFE** Number of Shields

Shield Layer 1 Helically Corrugated Copper Tube Outer Conductor 1 Material and Plating Copper

Outer Conductor Diameter 0.25 in [6.35 mm] Jacket Material FEP, Blue

Jacket Diameter 0.28 in [7.11 mm] One Time Minimum Bend Radius 1.25 in [31.75 mm]

**Bending Moment** 0.8 lbs-ft [1.08 N-m]



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### **Connectors**

Description	Connector 1	Connector 2	
Туре	4.3-10 Male	4.3-10 Male	
Impedance	50 Ohms	50 Ohms	
Configuration	Straight	Straight	
Connection Method	Snap-On	Snap-On	
Contact Material and Plating	Brass, Silver	Brass, Silver	
Contact Plating Specification	200 μin	200 μin	
Dielectric Type	PTFE	PTFE	
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	Brass, Tri-Metal	
Coupling Nut Plating Specification	80 μin	80 μin	
Torque	44.25 in-lbs 5 Nm	44.25 in-lbs 5 Nm	

### **Environmental Specifications**

Operating Range Temperature -55 to +200 deg C
Storage Range Temperature -55 to +200 deg C
Plenum Rating UL910

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**



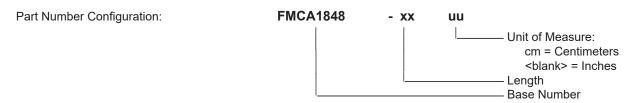


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### **FMCA1848**

### **How to Order**



Example: FMCA1848-12 = 12 inches long cable FMCA1848-100cm = 100 cm long cable

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax 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: Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male to

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spp250llpl-coax-fmca1848-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.

# **FMCA1848 CAD Drawing**

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

