

# Plenum Low PIM Snap-On 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts

The 4.3-10 male snap-on to RA 7/16 DIN male 12 inch cable using SPP-250-LLPL coax, part number FMCA1908-12, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to 7/16 DIN 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 FMCA1908-12 4.3-10 male to 7/16 DIN male cable assembly operates to 5.8 GHz. The right angle 7/16 DIN interface on the SPP-250-LLPL 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                   | Min | Typ Max      |    | Units | 5               |  |  |
|-------------------------------|-----|--------------|----|-------|-----------------|--|--|
| Frequency Range               | DC  | 5.8          |    |       | GHz             |  |  |
| VSWR                          |     |              |    | 1.4:1 |                 |  |  |
| Velocity of Propagation       |     | 7            | 5  |       | %               |  |  |
| RF Shielding                  | 100 |              |    |       | dB              |  |  |
| Passive Intermodulation       |     | -16          | 55 | -160  | dBc             |  |  |
| Capacitance                   |     | 27 [88.58]   |    |       | pF/ft [pF/m]    |  |  |
| Inductance                    |     | 0.067 [0.22] |    |       | uH/ft [uH/m]    |  |  |
| DC Resistance Inner Conductor |     | 3 [9.84]     |    |       | Ω/1000ft [Ω/Km] |  |  |

#### **Performance by Frequency**

| Description           | F1   | F2   | F3   | F4   | F5  | Units |
|-----------------------|------|------|------|------|-----|-------|
| Frequency             | 0.45 | 0.7  | 1    | 2.5  | 5.8 | GHz   |
| Insertion Loss (Max.) | 0.21 | 0.24 | 0.26 | 0.36 | 0.5 | 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 for the straight connector and 0.1 dB for the right angle connector.

# FMCA1908-12 DATA SHEET



## **Configuration:**

- Snap-On4.3-10 Male
- TC-SPP250-4310MS-LP
- 7/16 DIN Male Right Angle
- TC-SPP250-716M-RA-LP
- SPP-250-LLPL

## **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

# **Applications:**

- General Purpose
- Laboratory Use
- Low PIM Applications
- Distributed Antenna Systems (DAS)
- Plenum Installations
- 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





## **Mechanical Specifications**

**Cable Assembly** 

Length\* 12 in [304.8 mm]

Cable

Cable Type SPP-250-LLPL Impedance 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating Dielectric Type PTFE

Number of Shields 1

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

Outer Conductor Material and Flating

Outer Conductor Diameter

Jacket Material

Jacket Diameter

One Time Minimum Bend Radius 1.25 in [31.75 mm]

Bending Moment

0.8 lbs-ft [1.08 N-m]

0.25 in [6.35 mm]

0.28 in [7.11 mm]

FEP, Blue

#### **Connectors**

| Description                 | Connector 1           | Connector 2           |
|-----------------------------|-----------------------|-----------------------|
| Туре                        | 4.3-10 Male           | 7/16 DIN Male         |
| Impedance                   | 50 Ohms               | 50 Ohms               |
| Connection Method           | Snap-On               |                       |
| Contact Material & Plating  | Brass, Silver         | Brass, Silver         |
| Contact Plating Spec.       | 200μ in               | 196µ in               |
| Dielectric Type             | PTFE                  | PTFE                  |
| Body Material & Plating     | Brass, Tri-Metal      | Brass, Nickel         |
| Body Plating Spec.          | 80μ in                | 118µ in               |
| Coupling Nut Material & Pla | ting Brass, Tri-Metal | Brass, Nickel         |
| Coupling Nut Plating Spec.  | 80μ in                | 118µ in               |
| Torque                      | 44.25 in-lbs 5 Nn     | n 22.127 ft-lbs 30 Nm |
|                             |                       |                       |

## **Environmental Specifications**

**Temperature** 

Operating Range -55 to +200 deg C Storage Range -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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#### **How to Order**

| Part Number Configuration: | FMCA1908 | - | XX | uu |  |
|----------------------------|----------|---|----|----|--|
|                            |          |   |    | l  | cm = Centimeters<br><blank> = Inches</blank> |
|                            |          |   |    |    | Length                                       |

Example: FMCA1908-12 = 12 inches long cable

FMCA1908-100cm = 100 cm long cable

Plenum Low PIM Snap-On 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 12 Inch 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: Plenum Low PIM Snap-On 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts FMCA1908-12

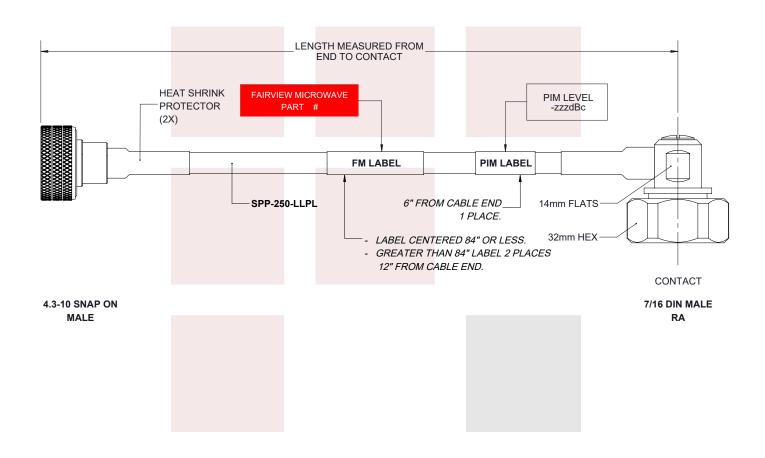
URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-7-16-male-cable-spp250llpl-fmca1908-12-p.aspx

The information contained in 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 implement 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 any liability arising out of the use of any part or documentation.

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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  | 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]. |          |       |        |      |                 |        |      |
|---|---|----------|-------|--------|------|-----------------|--------|------|
| Plenum Low PIM Snap-On 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts | DWG NO FMCA1908   |          |       |        |      | CAGE CODE 3FKR5 |        |      |
|   | CAD FILE (  | 06/05/19 | SHEET | 1 OF 1 | SCAL | E N/A           | SIZE A | 7361 |