

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts

**FMCA1848-12**



**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



**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 12 inch cable using SPP-250-LLPL coax, part number FMCA1848-12, 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 FMCA1848-12 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      |         | %     |

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts



**FMCA1848-12**

**Electrical Specifications**

| Description   | Minimum | Typical      | Maximum | Units                 |
|---|---------|--------------|---------|-----------------------|
| RF Shielding  | 100     |              |         | dB                    |
| Passive Intermodulation<br>IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz |         | -165         | -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]     |         | 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    |

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 12 in [304.8 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 1  
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]

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts



## FMCA1848-12

### Connectors

| Description                        | Connector 1       | Connector 2       |
|------------------------------------|-------------------|-------------------|
| Type                               | 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      | 200µ in           | 200µ in           |
| Dielectric Type                    | PTFE              | PTFE              |
| Body Material and Plating          | Brass, Tri-Metal  | Brass, Tri-Metal  |
| Body Plating Specification         | 80µ in            | 80µ in            |
| Coupling Nut Material and Plating  | Brass, Tri-Metal  | Brass, Tri-Metal  |
| Coupling Nut Plating Specification | 80µ in            | 80µ in            |
| 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.

Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts

**FMCA1848-12**



Typical Performance Data

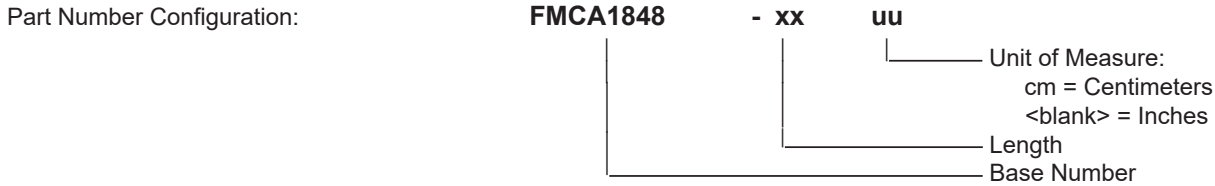


Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts



**FMCA1848-12**

**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 in 12 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.

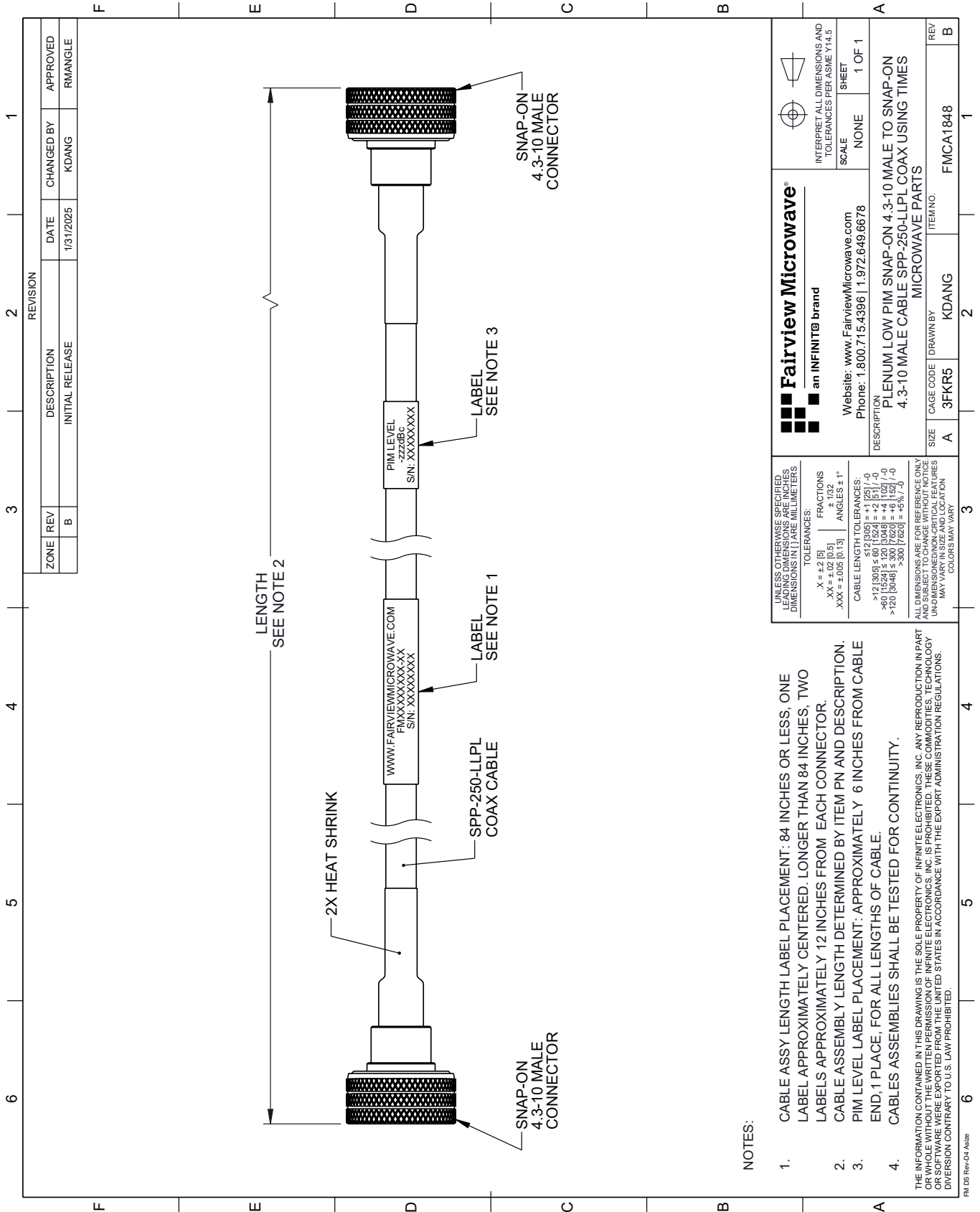
For additional information on this product, please click the following link: [Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts FMCA1848-12](https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spp250llpl-coax-fmca1848-12-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-male-4.3-10-male-cable-spp250llpl-coax-fmca1848-12-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 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 liability arising out of the use of any part or document.

# FMCA1848-12 CAD Drawing


Plenum Low PIM Snap-On 4.3-10 Male to Snap-On 4.3-10 Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts



**NOTES:**

1. CABLE ASSY LENGTH LABEL PLACEMENT: 84 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROXIMATELY 12 INCHES FROM EACH CONNECTOR.
2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
3. PIM LEVEL LABEL PLACEMENT: APPROXIMATELY 6 INCHES FROM CABLE END, 1 PLACE, FOR ALL LENGTHS OF CABLE.
4. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

|  |         |   |
|--|---------|---|
|  <b>Fairview Microwave</b><br>an INFINITIB brand                |         | Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a><br>Phone: 1.800.715.4396   1.972.649.6678 |
| UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.   |         | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5  |
| TOLERANCES:<br>.X = ±.2 [5]<br>.XX = ±.02 [0.5]<br>.XXX = ±.005 [0.13]   |         | SCALE: NONE<br>SHEET: 1 OF 1  |
| FRACTIONS: ± 1/32<br>ANGLES: ± 1°  |         |   |
| CABLE LENGTH TOLERANCES:<br><12 [305] ≤ 60 [1524] = ±1 [25] / -0<br>>60 [1524] ≤ 120 [3048] = ±4 [102] / -0<br>>120 [3048] ≤ 300 [7620] = ±5% / -0 |         |   |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.                         |         |   |
| DESCRIPTION  | SIZE    | ITEM NO.  |
| 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                                      | A 3FKR5 | FMCA1848  |
| DRAWN BY   | REV     |   |
| KDANG  | B       |   |