

Plenum Low PIM 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts



FMCA1906-48

Configuration

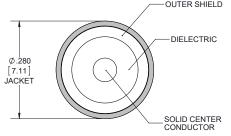
- Connector 1: 4.3-10 Male TC-250-4310M-LP
- Connector 2: 7/16 DIN Male Right Angle TC-SPP250-716M-RA-LP
- · Cable Type: SPP-250-LLPL · Coax Flex Type: Corrugated

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

OUTER SHIELD DIELECTRIC

SPP-250-LLPL



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 to RA 7/16 DIN male 48 inch cable using SPP-250-LLPL coax, part number FMCA1906-48, 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 FMCA1906-48 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 | 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.) | 0.33 | 0.39 | 0.43 | 0.64 | 0.95 | 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.

Mechanical Specifications

Cable Assembly

Length 48 in [121.92 cm] Width/Diameter 1.14 in [28.96 mm]

Cable

SPP-250-LLPL Cable Type 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

0.25 in [6.35 mm] Outer Conductor Diameter

Jacket Material FEP, Blue 0.28 in [7.11 mm] Jacket Diameter 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 | 7/16 DIN Male Right Angle |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Right Angle |
| Contact Material and Plating | Phosphor Bronze, Silver | Brass, Silver |
| Contact Plating Specification | 200μ in | 196µ in |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Nickel |
| Body Plating Specification | 80μ in | 118µ in |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Nickel |
| Coupling Nut Plating Specification | 80μ in | 118µ in |
| Torque | 44.25 in-lbs 5 Nm | 22.127 ft-lbs 30 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



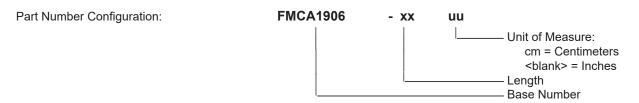


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How to Order



Example: FMCA1906-12 = 12 inches long cable FMCA1906-100cm = 100 cm long cable

Plenum Low PIM 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 48 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 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts FMCA1906-48

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-7-16-din-male-cable-spp250llpl-coax-fmca1906-48-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.

FMCA1906-48 CAD Drawing

Plenum Low PIM 4.3-10 Male to RA 7/16 DIN Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts

