

Plenum Low PIM Snap-On 4.3-10 Male to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts

FMCA1920-48



Configuration

- Connector 1: Snap-On 4.3-10 Male TC-SPP250-4310MS-LP
- Connector 2: SMA Male Right Angle TC-SPP250-SM-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



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 RA SMA male 48 inch cable using SPP-250-LLPL coax, part number FMCA1920-48, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to SMA 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 FMCA1920-48 4.3-10 male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA 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 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.) | 0.34 | 0.42 | 0.48 | 0.78 | 1.22 | 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 0.15*SQRT(FGHz) dB for the right angle connector.

Mechanical Specifications

Cable Assembly

Length 48 in [121.92 cm]

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]

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------------|-------------------------|
| Type | 4.3-10 Male | SMA Male Right Angle |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Right Angle |
| Connection Method | Snap-On | |
| Contact Material and Plating | Brass, Silver | Phosphor Bronze, Silver |
| Contact Plating Specification | 200μ in | 196μ in |
| Dielectric Type | PTFE | PTFE |
| Body Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Specification | 80μ in | 118μ in |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Coupling Nut Plating Specification | 80μ in | 118μ in |
| Torque | 44.25 in-lbs 5 Nm | 10 in-lbs 1.13 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

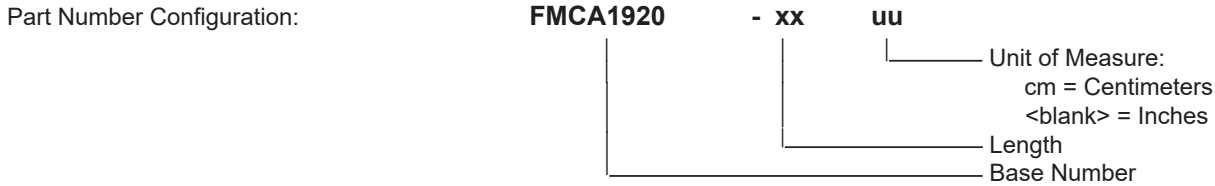


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How to Order



Example: FMCA1920-12 = 12 inches long cable
FMCA1920-100cm = 100 cm long cable

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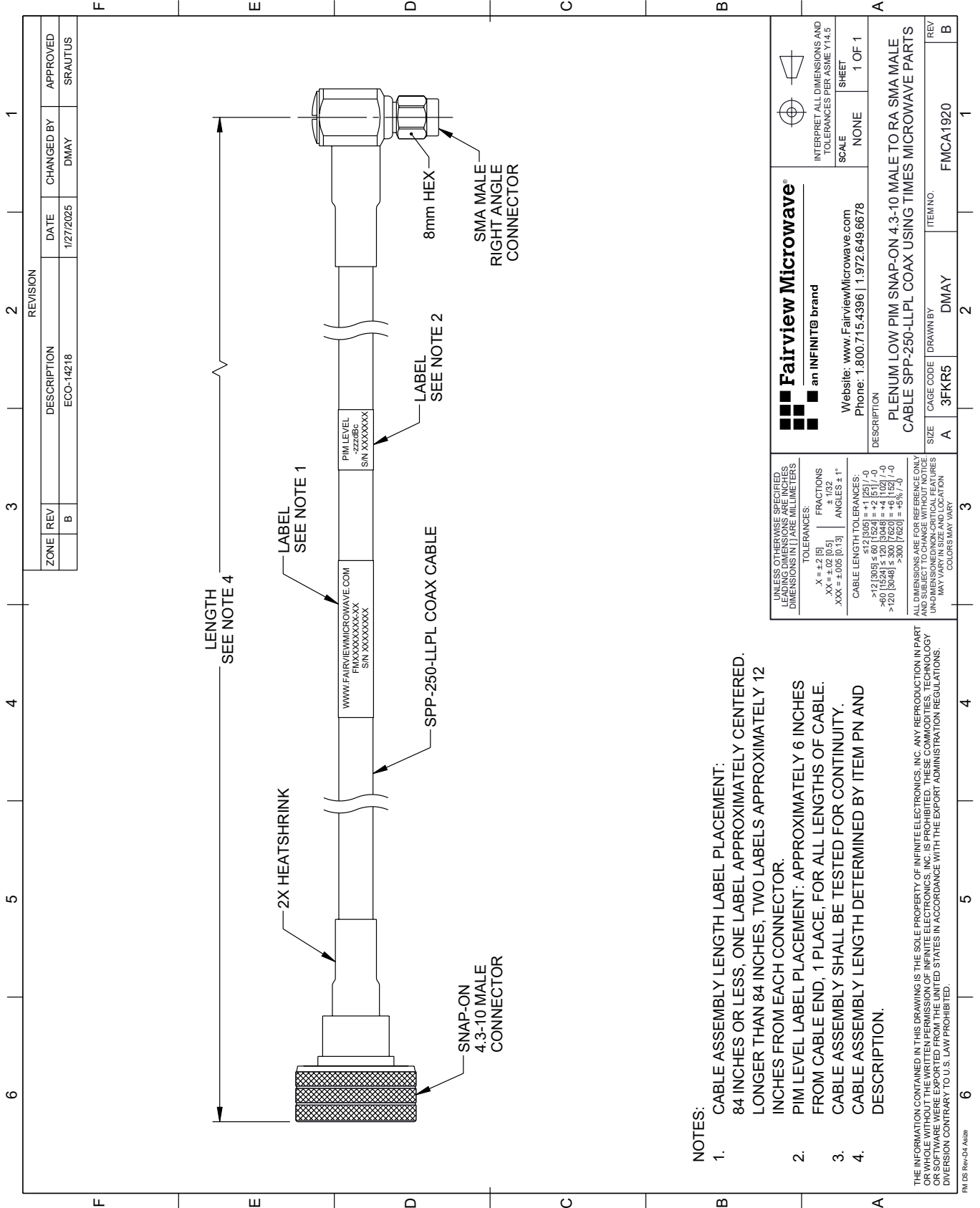
For additional information on this product, please click the following link: [Plenum Low PIM Snap-On 4.3-10 Male to RA SMA Male Cable SPP-250-LLPL Coax in 48 Inch Using Times Microwave Parts FMCA1920-48](https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-sma-male-cable-spp250llpl-coax-fmca1920-48-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-male-ra-sma-male-cable-spp250llpl-coax-fmca1920-48-p.aspx>

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FMCA1920-48 CAD Drawing


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NOTES:

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

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|  Fairview Microwave® an INFINITIB brand | | Website: www.FairviewMicrowave.com 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: .X = ±.2 [5] .XX = ±.02 [0.5] .XXX = ±.005 [0.13] | | SCALE: NONE SHEET: 1 OF 1 |
| FRACTIONS: ± 1/32 ANGLES: ± 1° | | |
| CABLE LENGTH TOLERANCES: >12 [305] ≤ 60 [1524] = ±1 [25] / -0 >60 [1524] ≤ 120 [3048] = ±4 [102] / -0 >120 [3048] ≤ 300 [7620] = ±8 [203] / -0 | | |
| ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE 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 RA SMA MALE CABLE SPP-250-LLPL COAX USING TIMES MICROWAVE PARTS | A 3FKR5 | FMCA1920 |
| DRAWN BY | DMAY | |