

FMCA1856 DATA SHEET

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

The 4.3-10 male to 7/16 DIN male cable using SPP-250-LLPL coax, part number FMCA1856, 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 FMCA1856 4.3-10 male to 7/16 DIN 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 | Min | T <mark>yp Max</mark> | | Units | | | |
| Frequency Range | DC | | | 5.8 | | GHz | |
| VSWR | | | | 1.4:1 | | | |
| Velocity of Propagation | | 76 | | % | | | |
| RF Shielding | 100 | | | | | dB | |
| Passive Intermodulation | | -165 -160 | | dBc | | | |
| Capacitance | | 27 [88.58] | | | pF/ft [pF/m] | | |
| Inductance | | 0.067 [0.22] | | | uH/ft [uH/m] | | |
| DC Resistance Inner Cor | iductor | 3 [9 | 9.84] | | Ω/100 | 0ft [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 | .) 0.038 | 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]



Configuration:

- 4.3-10 Male
- TC-250-4310M-LP
- 7/16 DIN Male
- TC-250-716M-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 Fairview Microwave





Cable

| Cubic | | | | | |
|--------------------------------------|----------------------------------|--|--|--|--|
| 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 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] | | | | |

Connectors

| Description | Connector 1 | Connector 2 |
|--------------------------------|----------------------|-----------------------|
| Туре | 4.3-10 Male | 7/16 DIN Male |
| Impedance | 50 Ohms | 50 Ohms |
| Contact Material & Plating | Phosphor Bronze, Sil | ver Brass, Silver |
| Contact Plating Spec. | 200 μin | 200 µin |
| Dielectric Type | PTFE | PTFE |
| Body Material & Plating | Brass, Tri-Metal | Brass, Tri-Metal |
| Body Plating Spec. | 80 µin | 80 µin |
| Coupling Nut Material & Platin | ng Brass, Tri-Metal | Brass, Nickel |
| Coupling Nut Plating Spec. | 80 µin | 80 µin |
| Torque | 44.25 in-lbs 5 Nn | n 22.127 ft-lbs 30 Nm |

Environmental Specifications

| Temperature | |
|-----------------|--|
| Operating Range | |
| Storage Range | |
| Plenum Rating | |

-55 to +200 deg C -55 to +200 deg C UL910

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA1856 - xx



Example: FMCA1856-12 = 12 inches long cable FMCA1856-100 cm = 100 cm long cable

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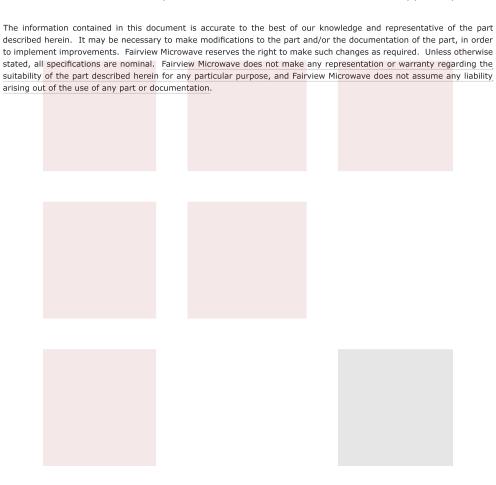




Plenum Low PIM 4.3-10 Male to 7/16 DIN Male Cable SPP-250-LLPL Coax Using Times Microwave Parts from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

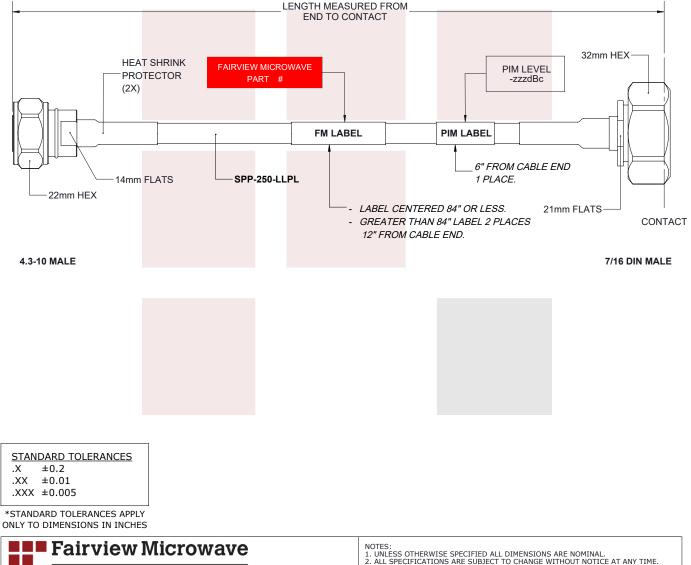
Click the following link to obtain additional part information: Plenum Low PIM 4.3-10 Male to 7/16 DIN Male Cable SPP-250-LLPL Coax Using Times Microwave Parts FMCA1856

URL: https://www.fairviewmicrowave.com/low-pim-4.3-10-male-7-16-din-male-cable-spp250llpl-coax-fmca1856-p.aspx









| an INFINIT® brand | | | | | E AT ANY I | IME. | |
|--|--------------------|--------------|-------|-----------------|------------|------|--|
| Plenum Low PIM 4.3-10 Male to 7/16 DIN Male Cable SPP-250-LLPL Coax Using Times Microwave Parts | DWG NO FMCA1856 | | | CAGE CODE 3FKR5 | | | |
| | CAD FILE 06/05/19 | SHEET 1 OF 1 | SCALE | N/A | SIZE A | 7361 | |

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