

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



FMCA1856-12

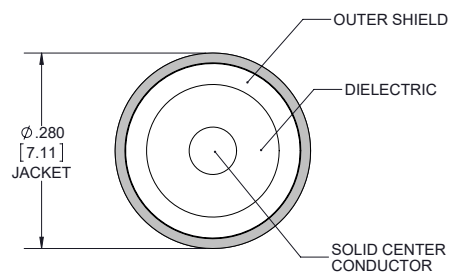
Configuration

- Connector 1: 4.3-10 Male TC-250-4310M-LP
- Connector 2: 7/16 DIN Male TC-250-716M-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 to 7/16 DIN male 12 inch cable using SPP-250-LLPL coax, part number FMCA1856-12, 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 FMCA1856-12 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 | Minimum | Typical | Maximum | Units |
|-------------------------|---------|---------|---------|-------|
| Frequency Range | DC | | 5.8 | GHz |
| VSWR | | | 1.4:1 | |
| Velocity of Propagation | | 76 | | % |
| RF Shielding | 100 | | | dB |

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Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|---|---------|--------------|---------|-----------------------|
| 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.) | 0.18 | 0.23 | 0.26 | 0.42 | 0.65 | 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 1.14 in [28.96 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]

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Connectors

| Description | Connector 1 | Connector 2 |
|------------------------------------|-------------------------|---------------------|
| Type | 4.3-10 Male | 7/16 DIN Male |
| Impedance | 50 Ohms | 50 Ohms |
| Configuration | Straight | Straight |
| Contact Material and Plating | Phosphor Bronze, 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 | 80 µin |
| Coupling Nut Material and Plating | Brass, Tri-Metal | Brass, Nickel |
| Coupling Nut Plating Specification | 80µ in | 80 µin |
| 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



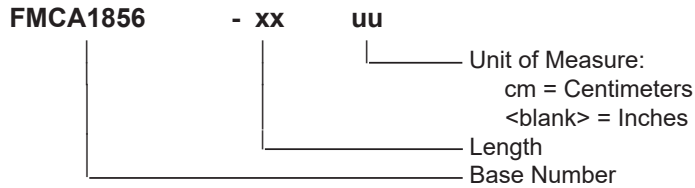
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How to Order

Part Number Configuration:



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

Plenum Low PIM 4.3-10 Male to 7/16 DIN 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.

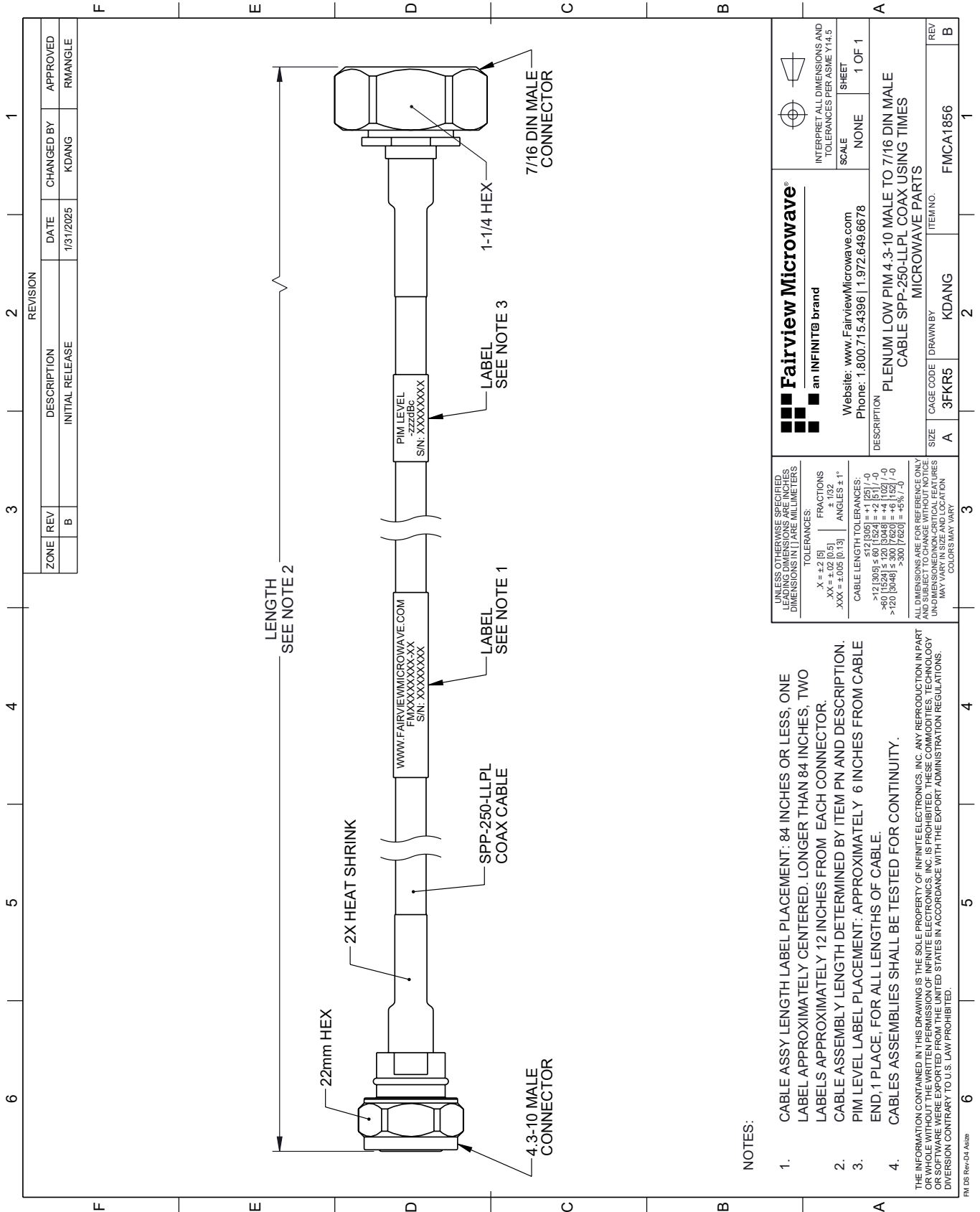
For additional information on this product, please click the following link: [Plenum Low PIM 4.3-10 Male to 7/16 DIN Male Cable SPP-250-LLPL Coax in 12 Inch Using Times Microwave Parts FMCA1856-12](https://www.fairviewmicrowave.com/low-pim-4.3-10-male-7-16-din-male-cable-spp250llpl-coax-fmca1856-12-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-4.3-10-male-7-16-din-male-cable-spp250llpl-coax-fmca1856-12-p.aspx>

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FMCA1856-12 CAD Drawing

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



| REVISION | | DATE | CHANGED BY | APPROVED |
|-----------------|-----|-----------|------------|----------|
| ZONE | REV | | | |
| | B | 1/31/2025 | KDANG | RMANGLE |
| DESCRIPTION | | | | |
| INITIAL RELEASE | | | | |

| | | | |
|--|-----------|---|--|
| Fairview Microwave [®] an INFINIT [®] brand | | Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678 | INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE NONE SHEET 1 OF 1 |
| DESCRIPTION PLENUM LOW PIM 4.3-10 MALE TO 7/16 DIN MALE CABLE SPP-250-LLPL COAX USING TIMES MICROWAVE PARTS | | | |
| SIZE | CAGE CODE | DRAWN BY | ITEM NO. |
| A | 3FKR5 | KDANG | FMCA1856 |

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0
 >120 [3048] ≤ 300 [7620] = ±.25 [6.35] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE UNDIMENSIONED NON-CRITICAL FEATURES. COLORS MAY VARY.

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.

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