

Low PIM 4.3-10 Female to SMA Male Plenum Cable  
SPP-250-LLPL Coax in 12 Inch with LF Solder



**FMCA1769-12**

**Configuration**

- Connector 1: 4.3-10 Female
- Connector 2: SMA Male
- Cable Type: SPP-250-LLPL
- Coax Flex Type: Corrugated

**Features**

- Max Frequency 5.8 GHz
- Low PIM: -155 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket
- IP67 (Mated)
- Low Loss with Excellent VSWR
- PIM Test Results Marked on Each Cable
- UL910 Plenum Rated Cable
- Extremely Flexible and Lightweight



**Applications**

- General Purpose
- Laboratory Use
- Low PIM Applications
- DAS
- Mobile Networks
- In-Building Wireless
- Small Cells
- PIM Testing

**Description**

The 4.3-10 female to SMA male 12 inch cable using SPP-250-LLPL coax, part number FMCA1769-12, from Fairview Microwave is in-stock and ships same day. This Fairview 4.3-10 to SMA cable assembly has a female 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 -155 dBc. The FMCA1769-12 4.3-10 female to SMA male cable assembly operates to 5.8 GHz.

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
Passive Intermodulation			-155	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				

Low PIM 4.3-10 Female to SMA Male Plenum Cable  
SPP-250-LLPL Coax in 12 Inch with LF Solder



**FMCA1769-12**

**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
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.)	0.1	0.12	0.14	0.23	0.35	dB

Electrical Specification Notes:

The insertion loss data above is based on the performance specifications of the coax cable used in this assembly. The insertion loss includes an estimated insertion loss of  $0.04 \cdot \sqrt{\text{FGHz}}$  dB maximum per connector.

**Mechanical Specifications**

**Cable Assembly**

Length	12 in [304.8 mm]
Weight	0.202 lbs [91.63 g]

**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
Outer Conductor 1 Material and Plating	Copper
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]

Low PIM 4.3-10 Female to SMA Male Plenum Cable  
SPP-250-LLPL Coax in 12 Inch with LF Solder



**FMCA1769-12**

**Connectors**

Description	Connector 1	Connector 2
Type	4.3-10 Female	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Gold
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Phosphor Bronze, Tri-Metal	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating		Brass, Tri-Metal

**Environmental Specifications**

Operating Range Temperature -55 to +165 deg C

**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

Low PIM 4.3-10 Female to SMA Male Plenum Cable  
SPP-250-LLPL Coax in 12 Inch with LF Solder



**FMCA1769-12**

Typical Performance Data



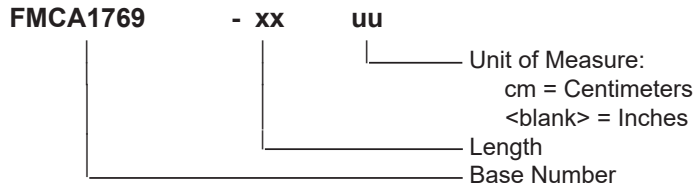
Low PIM 4.3-10 Female to SMA Male Plenum Cable  
SPP-250-LLPL Coax in 12 Inch with LF Solder



**FMCA1769-12**

**How to Order**

Part Number Configuration:



Example: FMCA1769-12 = 12 inches long cable  
FMCA1769-100cm = 100 cm long cable

Low PIM 4.3-10 Female to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder 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.

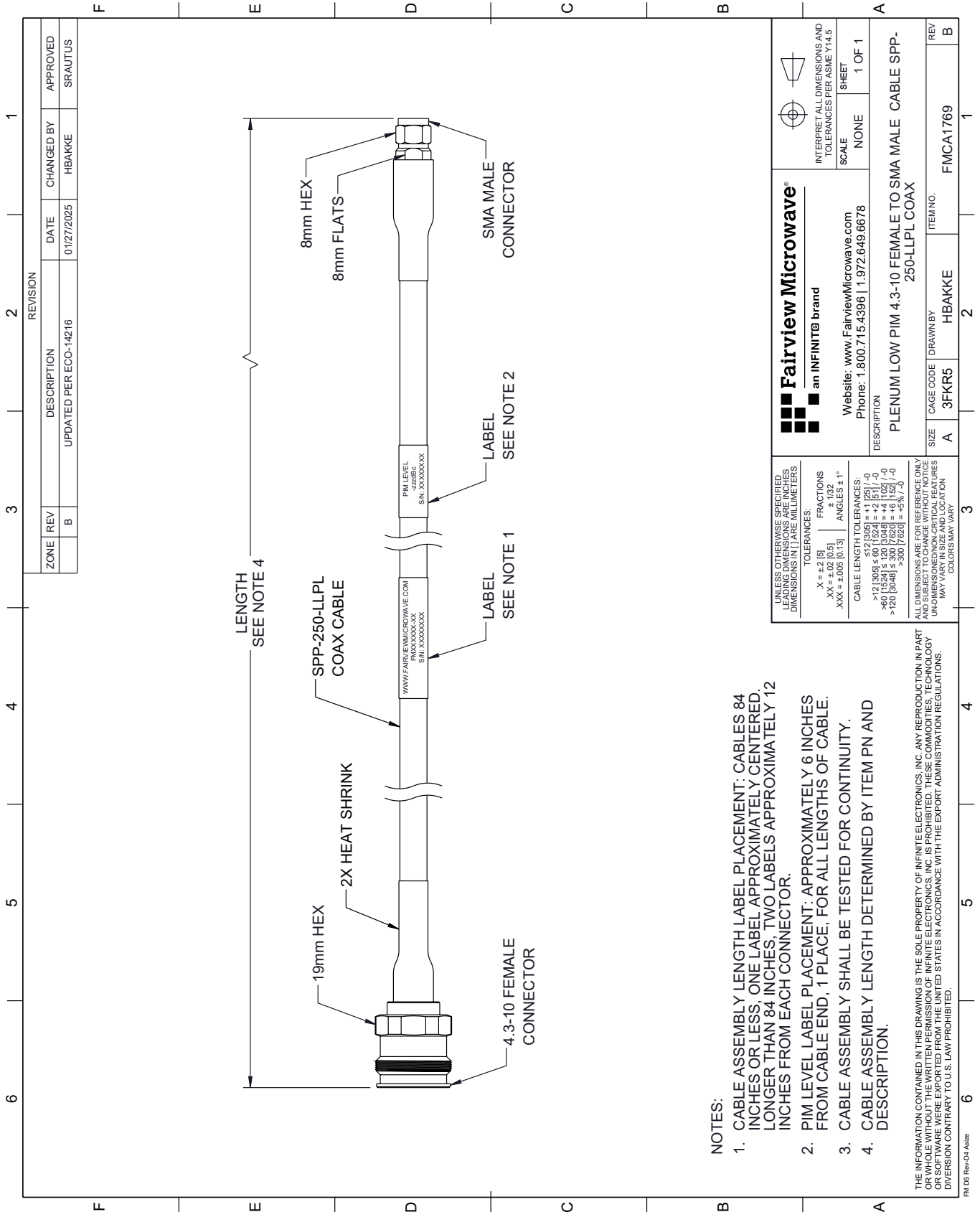
For additional information on this product, please click the following link: [Low PIM 4.3-10 Female to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder FMCA1769-12](#)

URL: <https://www.fairviewmicrowave.com/4.3-10-female-sma-male-cable-spp250llpl-coax-fmca1769-12-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.

# FMCA1769-12 CAD Drawing

Low PIM 4.3-10 Female to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch with LF Solder



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	B	UPDATED PER ECO-14216	HBAKKE	SRAUTUS

 <b>Fairview Microwave®</b> an INFINIT® brand Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> 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 FEMALE TO SMA MALE CABLE SPP-250-LLPL COAX		
SIZE	CAGE CODE	ITEM NO.
A	3FKR5	FMCA1769
REV	REV	
B	B	

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

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 [304.8] ≤ 60 [1524] = ±.1 [2.5] / -0  
 >60 [1524] ≤ 120 [3048] = ±.4 [10.2] / -0  
 >120 [3048] ≤ 300 [7620] = ±.6 [15.2] / -0  
 >300 [7620] = ±.8 [20.3] / -0  
 ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.