

Low PIM SMA Male to SMA Male Plenum  
Cable SPP-250-LLPL Coax in 12 Inch



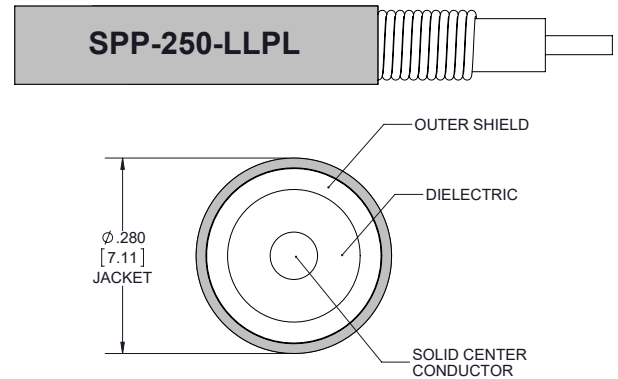
**FMC00702-12**

**Configuration**

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

**Features**

- Max Frequency 6 GHz
- Low PIM: -155 dBc Max
- Shielding Effectivity > 100 dB
- 76% Phase Velocity
- FEP Jacket



**Applications**

- General Purpose
- Laboratory Use
- Low PIM Applications

**Description**

The SMA male to SMA male 12 inch cable using SPP-250-LLPL coax, part number FMC00702-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA 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 -155 dBc. The FMC00702-12 SMA male to SMA male cable assembly operates to 6 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		6	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-155	dBc
Capacitance		29 [95.14]		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**

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	500	1000	2500	5800	
FMC00702	Custom Lengths Available	Insertion Loss (Typ.)	0.04	0.05	0.09	0.14	dB/ft	
			0.13	0.17	0.3	0.46	dB/m	
FMC00702-12	12 Inch	Insertion Loss (Typ.)	0.24	0.25	0.29	0.34	dB	0.11
FMC00702-24	24 Inch	Insertion Loss (Typ.)	0.28	0.3	0.38	0.48	dB	0.181
FMC00702-36	36 Inch	Insertion Loss (Typ.)	0.32	0.35	0.47	0.62	dB	0.251
FMC00702-60	60 Inch	Insertion Loss (Typ.)	0.4	0.45	0.65	0.9	dB	0.391
FMC00702-50CM	50 cm	Insertion Loss (Typ.)	0.27	0.29	0.35	0.43	dB	0.332

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB  
 Loss due to Connector 2: 0.1 dB  
 Base Weight: 0.11 pounds  
 Additional Weight per Inch: 0.00584 pounds

**Mechanical Specifications**

**Cable Assembly**

Length: 12 in [304.8 mm]  
 Width/Diameter: 0.5 in [12.7 mm]  
 Weight: 0.11 lbs [49.9 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]

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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

**Environmental Specifications**

Operating Range Temperature -40 to +155 deg C

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

**Plotted and Other Data**

Notes:

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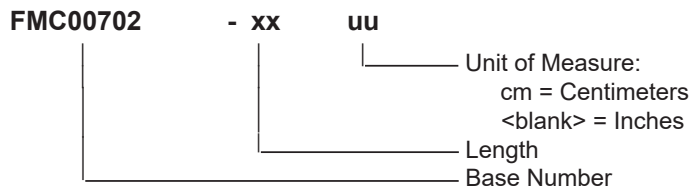


**FMC00702-12**

**Typical Performance Data**

**How to Order**

Part Number Configuration:



Example:    FMC00702-12 = 12 inches long cable  
              FMC00702-100cm = 100 cm long cable

Low PIM SMA Male to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch 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.

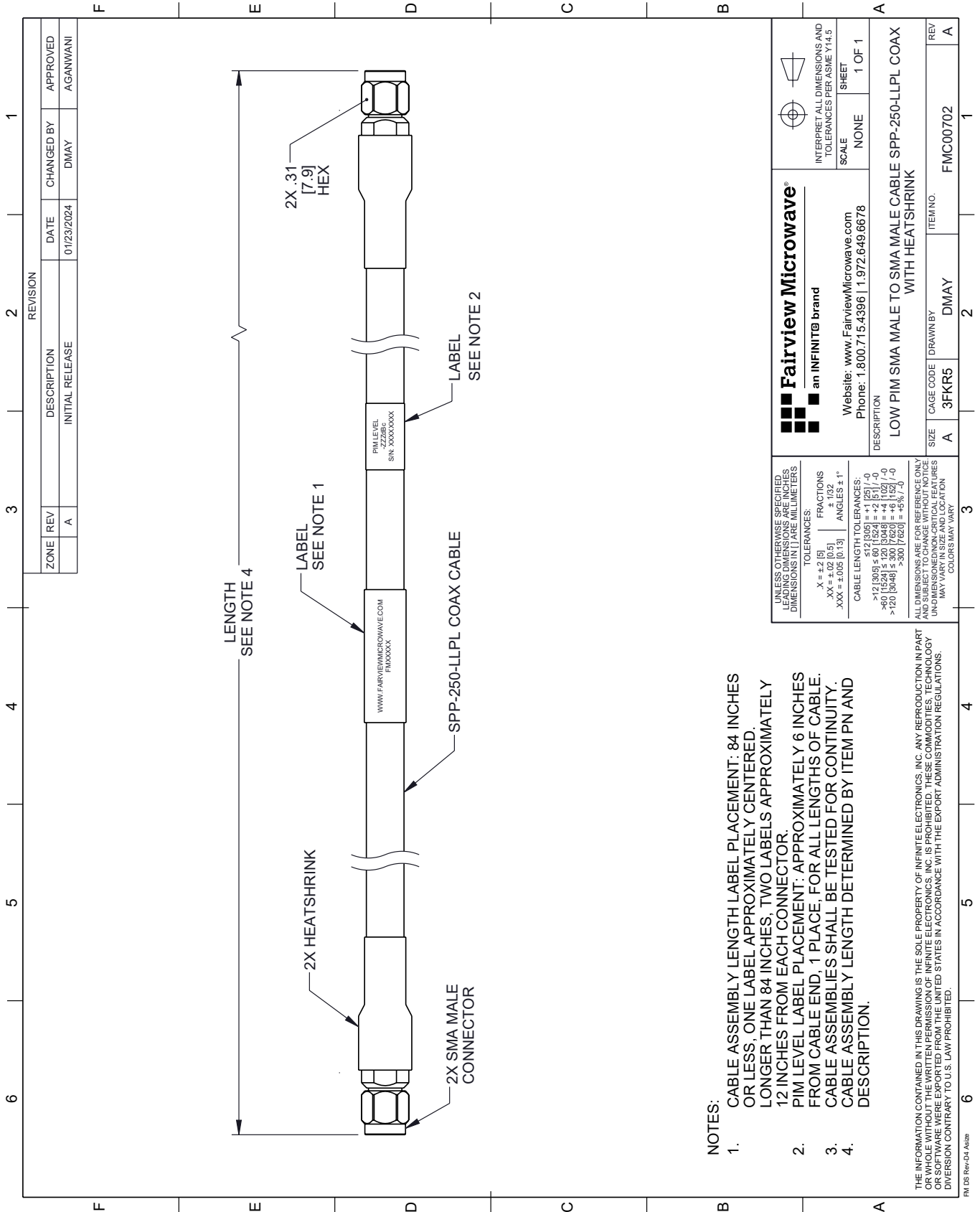
For additional information on this product, please click the following link: [Low PIM SMA Male to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch FMC00702-12](#)

URL: <https://www.fairviewmicrowave.com/low-pim-sma-male-to-sma-male-plenum-cable-spp-250-llpl-coax-in-12-inch-fmc00702-12-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.

# FMC00702-12 CAD Drawing

Low PIM SMA Male to SMA Male Plenum Cable SPP-250-LLPL Coax in 12 Inch



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			AGANWANI

 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 LOW PIM SMA MALE TO SMA MALE CABLE SPP-250-LLPL COAX WITH HEATSHRINK			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	DMAY	FMC00702
REV			A

- NOTES:**
- CABLE ASSEMBLY LABEL PLACEMENT: 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 ASSEMBLIES 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 IN MILLIMETERS.  
 TOLERANCES:  
 .X = +.2 [-.5]      FRACTIONS ± 1/32  
 .XX = +.02 [-.05]      ± 1/32  
 .XXX = ±.005 [-.013]      ANGLES ± 1°  
 CABLE LENGTH TOLERANCES:  
 <math>>12 [304.8] \le 60 [1524] = +2 [51] / -0</math>  
 <math>>60 [1524] \le 120 [3048] = +4 [102] / -0</math>  
 <math>>120 [3048] \le 300 [7620] = +5 [127] / -0</math>  
 ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONS/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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