

Plenum Low PIM N Female Bulkhead to SMA Male Cable
SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts



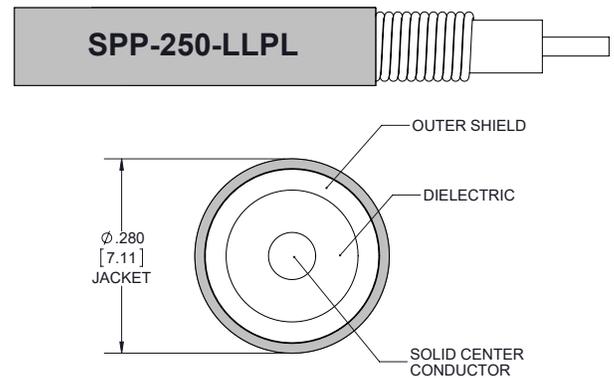
FMCA1884-100CM

Configuration

- Connector 1: N Female Bulkhead TC-SPP250-NF-BH-LP
- Connector 2: SMA Male TC-SPP250-SM-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 type N female bulkhead to SMA male 100 cm cable using SPP-250-LLPL coax, part number FMCA1884-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview type N 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 -160 dBc. The FMCA1884-100CM type N female to SMA male cable assembly operates to 5.8 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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	

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Velocity of Propagation		76		%
RF Shielding	100			dB
Passive Intermodulation		-165	-160	dBc
IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz				
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.)	0.38	0.41	0.44	0.56	0.74	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 dB for the female connector and 0.15 dB for the male connector.

Mechanical Specifications

Cable Assembly

Length 39.3701 in [100 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	N Female Bulkhead	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Phosphor Bronze, Silver	Brass, Silver
Contact Plating Specification	196µ in	196µ in
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Brass, Tri-Metal	
Outer Conductor Plating Specification	118µ in	
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118µ in	118µ in
Coupling Nut Material and Plating		Brass, Tri-Metal
Coupling Nut Plating Specification		118µ in
Torque	10 in-lbs 1.13 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

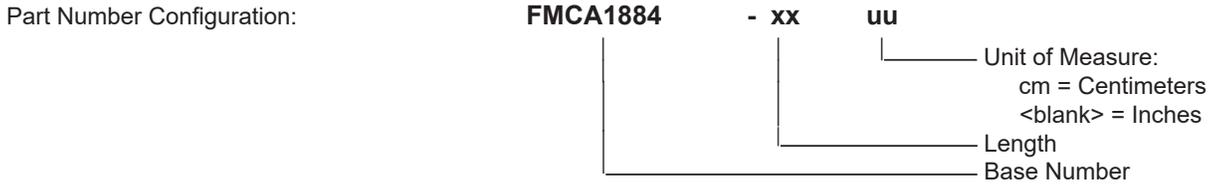


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FMCA1884-100CM

How to Order



Example: FMCA1884-12 = 12 inches long cable
FMCA1884-100cm = 100 cm long cable

Plenum Low PIM N Female Bulkhead to SMA Male Cable SPP-250-LLPL Coax in 100 cm 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.

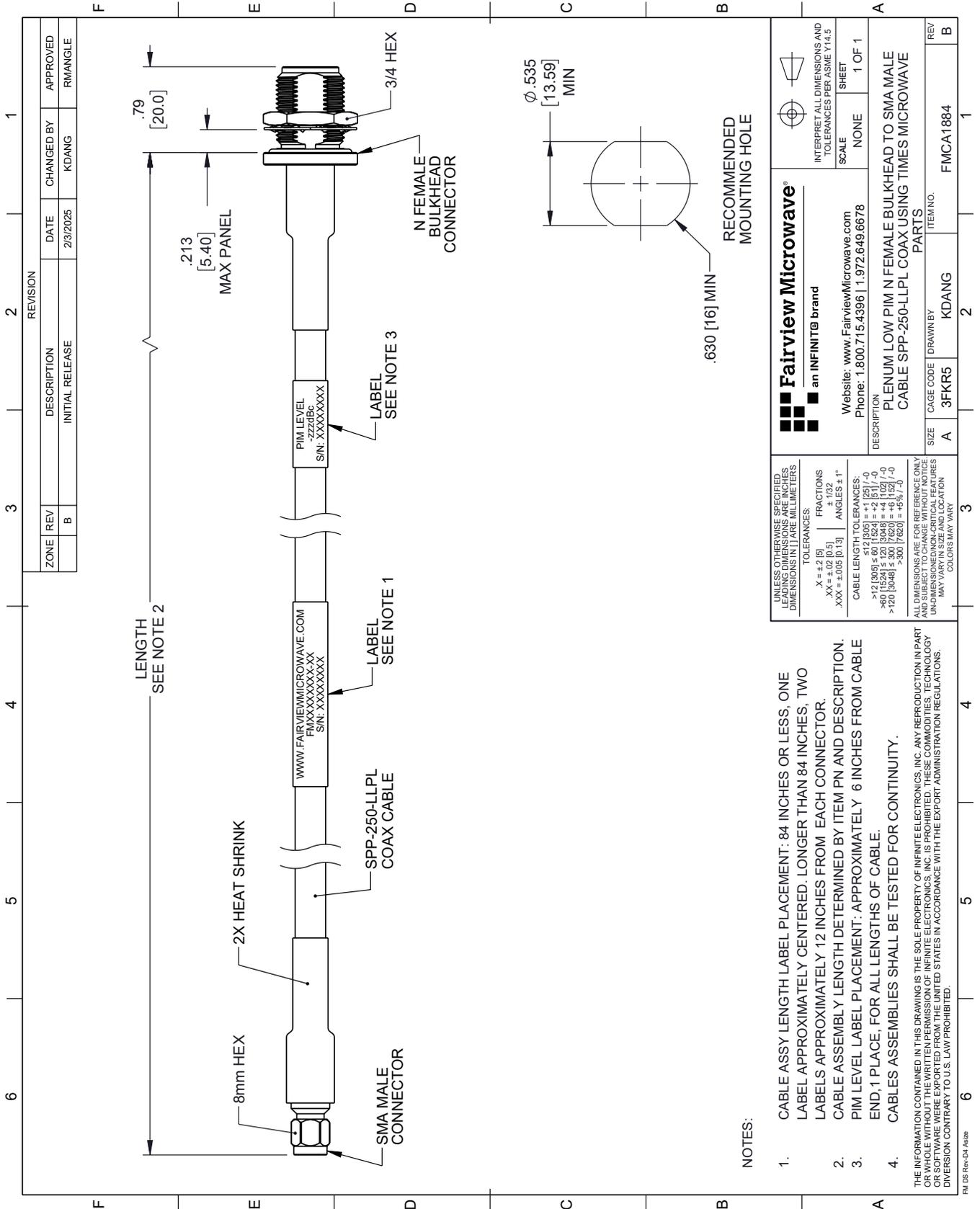
For additional information on this product, please click the following link: [Plenum Low PIM N Female Bulkhead to SMA Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts FMCA1884-100CM](https://www.fairviewmicrowave.com/low-pim-n-female-sma-male-cable-spp250llpl-coax-fmca1884-100cm-p.aspx)

URL: <https://www.fairviewmicrowave.com/low-pim-n-female-sma-male-cable-spp250llpl-coax-fmca1884-100cm-p.aspx>

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FMCA1884-100CM CAD Drawing

Plenum Low PIM N Female Bulkhead to SMA Male Cable SPP-250-LLPL Coax in 100 cm Using Times Microwave Parts



ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
B		INITIAL RELEASE	2/3/2025	KDANG	RMANGLE

 an INFINITI [®] 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 N FEMALE BULKHEAD TO SMA MALE CABLE SPP-250-LLPL COAX USING TIMES MICROWAVE PARTS		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO: FMCA1884
DRAWN BY: KDANG	REV: B	

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] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [15] / -0
 >300 [7620] = ±.6% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. 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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