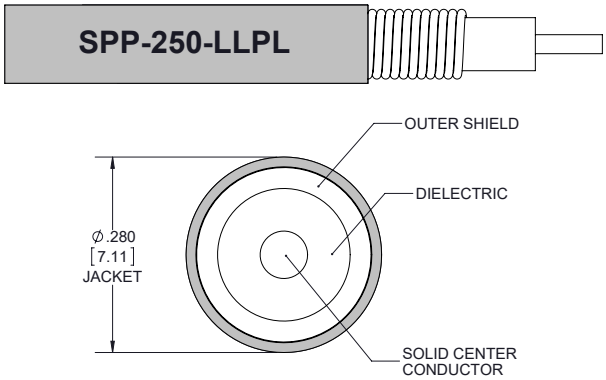
Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

FMCA1878

Configuration

- Connector 1: SMA Male Right Angle TC-SPP250-SM-RA-LP
- Connector 2: SMA Male Right Angle TC-SPP250-SM-RA-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 RA SMA male to RA SMA male cable using SPP-250-LLPL coax, part number FMCA1878, 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 -160 dBc. The FMCA1878 SMA male to SMA male cable assembly operates to 5.8 GHz. The right angle SMA interfaces on the SPP-250-LLPL cable allow for easier connections in tight spaces. 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		%

+1 (866) 839-4711 | sales@fairviewmicrowave.com | fairviewmicrowave.com

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

FMCA1878

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
RF Shielding	100			dB
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.)	0.038	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 0.15*SQRT(FGHz) dB per connector.

Mechanical Specifications

Cable Assembly

Length	0 in [0 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]

+1 (866) 839-4711 | sales@fairviewmicrowave.com | fairviewmicrowave.com

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

FMCA1878

Connectors

Description	Connector 1	Connector 2
Type	SMA Male Right Angle	SMA Male Right Angle
Impedance	50 Ohms	50 Ohms
Configuration	Right Angle	Right Angle
Contact Material and Plating	Phosphor Bronze, Silver	Phosphor Bronze, Silver
Contact Plating Specification	196 µin	196 µin
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Specification	118 µin	118 µin
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Specification	118 µin	118 µin
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.

+1 (866) 839-4711 | sales@fairviewmicrowave.com | fairviewmicrowave.com

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

FMCA1878

Typical Performance Data

+1 (866) 839-4711 | sales@fairviewmicrowave.com | fairviewmicrowave.com

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts

FMCA1878

How to Order

Part Number Configuration: **FMCA1878 - xx uu**

- **uu** — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- **xx** — Length
- **FMCA1878** — Base Number

Example: FMCA1878-12 = 12 inches long cable
FMCA1878-100cm = 100 cm long cable

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax 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 RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts FMCA1878

URL: https://www.fairviewmicrowave.com/low-pim-ra-sma-male-ra-sma-male-cable-spp250llpl-coax-fmca1878-p.aspx

FMCA1878 CAD Drawing

Plenum Low PIM RA SMA Male to RA SMA Male Cable SPP-250-LLPL Coax Using Times Microwave Parts