

## Low Loss RA SMB Plug to RA SMB Plug Cable LMR-100 Coax, 180 Degree Clocking

The RA SMB plug to RA SMB plug cable using LMR-100 coax, part number FMC00778/0400, from Fairview Microwave is in-stock and ships same day. This Fairview SMB to SMB cable assembly has a plug to plug gender configuration with 50 ohm flexible LMR-100A coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00778/0400 SMB plug to SMB plug cable assembly operates to 4 GHz. The right angle SMB interfaces on the LMR-100A cable allow for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Min	Typ	Max	Units
Frequency Range	DC		4	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
RF Shielding	90			dB
Group Delay		1.54 [5.05]		ns/ft [ns/m]
Capacitance		30.8 [101.05]		pF/ft [pF/m]
Inductance		0.077 [0.25]		uH/ft [uH/m]
DC Resistance Inner Conductor		81 [265.75]		$\Omega$ /1000ft [ $\Omega$ /Km]
DC Resistance Outer Conductor		9.5 [31.17]		$\Omega$ /1000ft [ $\Omega$ /Km]
Jacket Spark			2,000	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.07	0.11	0.16	0.24	0.5	dB/ft
	0.23	0.36	0.52	0.79	1.64	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.024 lbs [10.89 g]

#### Cable

Cable Type LMR-100A  
 Impedance 50 Ohms  
 Inner Conductor Type Solid



### Configuration:

- SMB Plug Right Angle
- SMB Plug Right Angle
- LMR-100A

### Features:

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

Fairview Microwave  
 301 Leora Ln., Suite 100  
 Lewisville, TX 75056  
 Tel: 1-800-715-4396 / (972) 649-6678  
 Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

Inner Conductor Material and Plating	Copper Clad Steel
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.11 in [2.79 mm]
One Time Minimum Bend Radius	0.25 in [6.35 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]
Bending Moment	0.1 lbs-ft [0.14 N-m]
Flat Plate Crush	10 lbs/in [0.18 Kg/mm]
Tensile Strength	15 lbs [6.8 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	SMB Plug	SMB Plug
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	30 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Gold
Body Plating Spec.	3 µin minimum	3 µin minimum

**Environmental Specifications**

**Temperature**

Operating Range -40 to +85 deg C

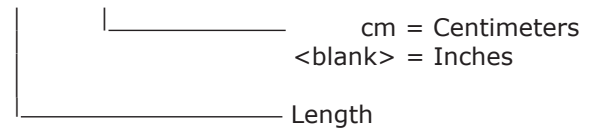
**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration: **FMC00778/0400 - xx uu**



Example: FMC00778/0400-12 = 12 inches long cable  
FMC00778/0400-100cm = 100 cm long cable

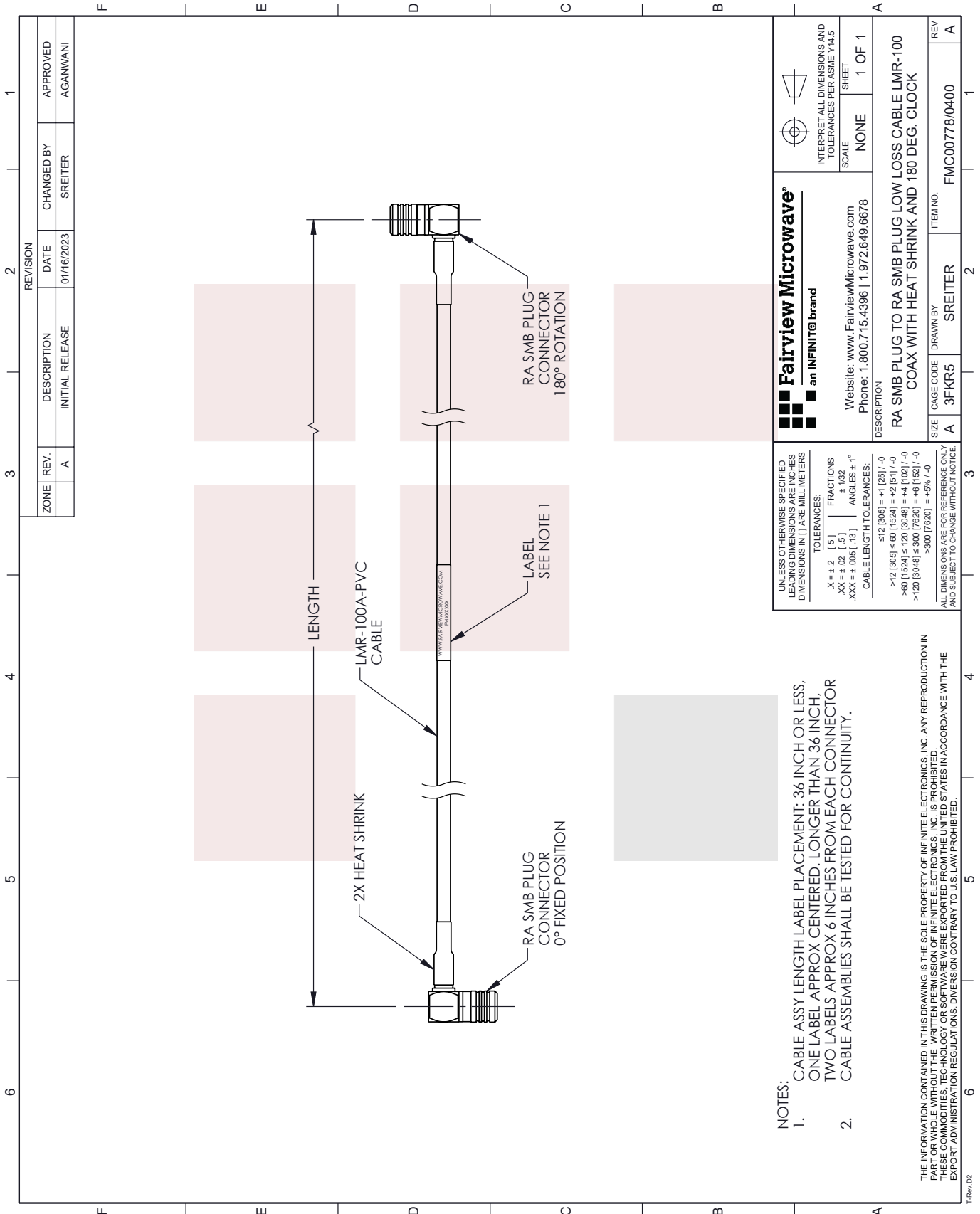
Low Loss RA SMB Plug to RA SMB Plug Cable LMR-100 Coax, 180 Degree Clocking from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA SMB Plug to RA SMB Plug Cable LMR-100 Coax, 180 Degree Clocking FMC00778/0400](https://www.fairviewmicrowave.com/low-loss-ra-smb-plug-to-ra-smb-plug-cable-lmr-100-coax-180-degree-clocking-fmc00778-0400)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-smb-plug-to-ra-smb-plug-cable-lmr-100-coax-180-degree-clocking-fmc00778-0400-p.aspx>

The information contained in 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 any liability arising out of the use of any part or documentation.





**NOTES:**

1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCH OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

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

TOLERANCES:  
.X = ±.2 [ .5 ] FRACTIONS  
.XX = ±.02 [ .5 ] ±.132  
.XXX = ±.005 [ .13 ] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
≤12 [305] = +1 [25] / -0  
>12 [305] ≤ 60 [1524] = +2 [51] / -0  
>60 [1524] ≤ 120 [3048] = +4 [102] / -0  
>120 [3048] ≤ 300 [7620] = +6 [152] / -0  
>300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: <b>RA SMB PLUG TO RA SMB PLUG LOW LOSS CABLE LMR-100</b> COAX WITH HEAT SHRINK AND 180 DEG. CLOCK		
SIZE: A CAGE CODE: 3FKR5	DRAWN BY: SREITER	ITEM NO.: FMC00778/0400 REV: A

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

T-Rev D2