

Low Loss RP SMA Plug to RP SMA Jack Cable LMR-240-UF Coax with LF Solder

The RP SMA plug to RP SMA jack cable using LMR-240-UF coax, part number FMC00509/0001, from Fairview Microwave is in-stock and ships same day. This Fairview reverse polarity SMA to reverse polarity SMA cable assembly has a plug to jack gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00509/0001 reverse polarity SMA plug to reverse polarity SMA jack cable assembly operates to 5.8 GHz. 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		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		4.28 [14.04]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /1000ft [Ω /Km]
Jacket Spark			5,000	Vrms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.046	0.066	0.095	0.155	0.244	dB/ft
	0.15	0.22	0.31	0.51	0.8	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.055 lbs [24.95 g]

Cable

Cable Type LMR-240-UF
 Impedance 50 Ohms
 Inner Conductor Type Stranded



Configuration:

- SMA Plug Reverse Polarity
- SMA Jack Reverse Polarity
- LMR-240-UF

Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- TPE Jacket

Applications:

- General Purpose
- Laboratory Use

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Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	TPE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.13 lbs-ft [0.18 N-m]
Flat Plate Crush	13 lbs/in [0.23 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

Connectors

Description	Connector 1	Connector 2
Type	SMA Plug	SMA Jack
Polarity	Reverse Polarity	Reverse Polarity
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Gold	Brass, Gold
Coupling Nut Material & Plating	Brass, Gold	Brass, Gold
Hex Size	5/16 inch	
Torque	5 in-lbs 0.57 Nm	

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMC00509/0001 - xx uu

cm = Centimeters
<blank> = Inches

Length

Example: FMC00509/0001-12 = 12 inches long cable
FMC00509/0001-100cm = 100 cm long cable

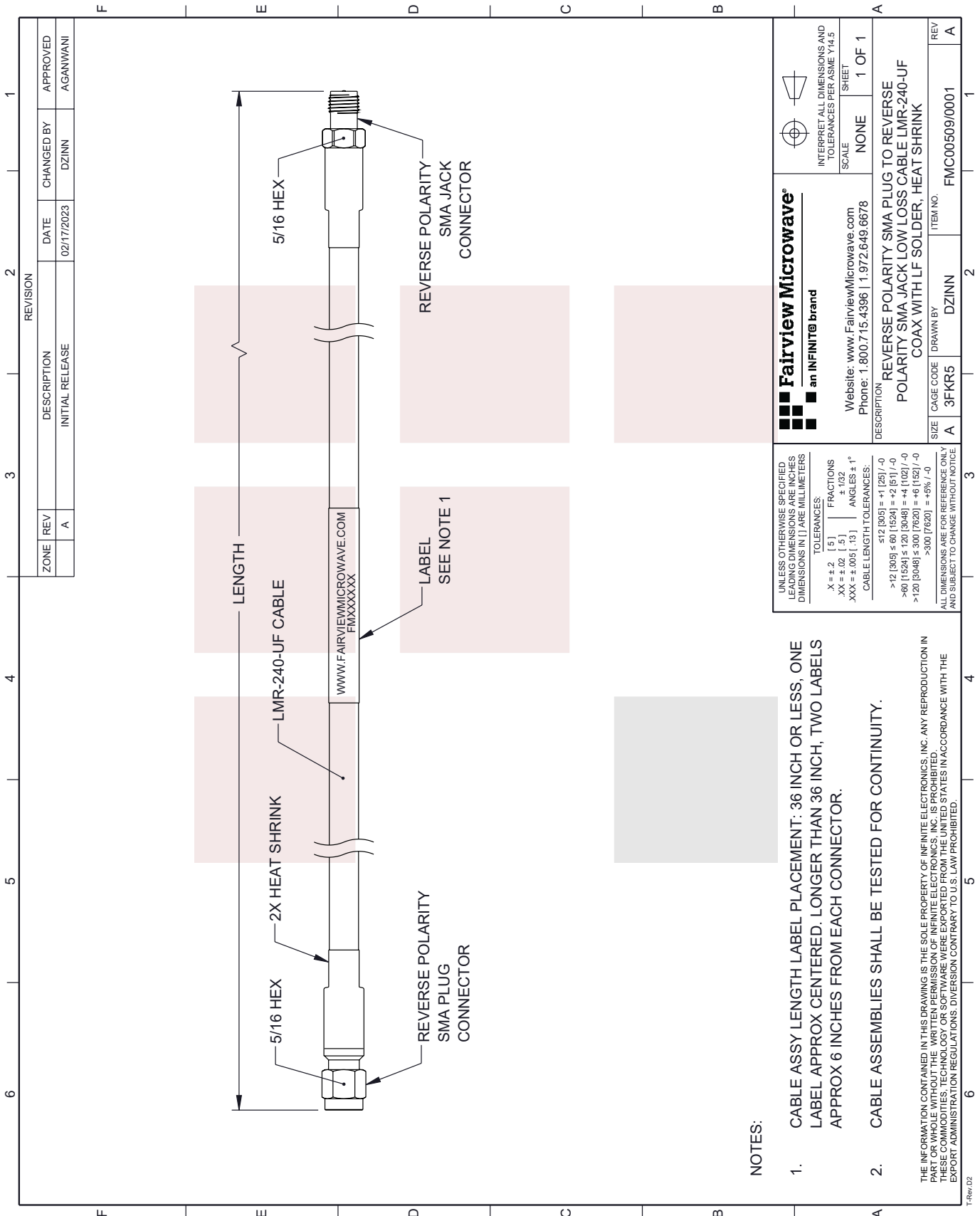
Low Loss RP SMA Plug to RP SMA Jack Cable LMR-240-UF Coax with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RP SMA Plug to RP SMA Jack Cable LMR-240-UF Coax with LF Solder FMC00509/0001](https://www.fairviewmicrowave.com/low-loss-rp-sma-plug-to-rp-sma-jack-cable-lmr-240-uf-coax-with-lf-solder-fmc00509-0001)

URL: <https://www.fairviewmicrowave.com/low-loss-rp-sma-plug-to-rp-sma-jack-cable-lmr-240-uf-coax-with-lf-solder-fmc00509-0001-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.





ZONE		REVISION		APPROVED	
REV	DESCRIPTION	DATE	CHANGED BY		
A	INITIAL RELEASE	02/17/2023	DZINN	AGANWANI	

<p>Fairview Microwave an INFINIT[®] brand</p> <p>Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: REVERSE POLARITY SMA PLUG TO REVERSE POLARITY SMA JACK LOW LOSS CABLE LMR-240-UJ COAX WITH LF SOLDER, HEAT SHRINK</p>		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: FMC00509/0001
DRAWN BY: DZINN		REV: A

NOTES:

- 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.

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

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

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

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T-Rev D2