

Low Loss SMA Male to RA SMA Male
Cable LL142 Coax in 50 cm



FMC00933/0002-50CM

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: LL142
- Coax Flex Type: Flexible

Features

- Max Frequency 18 GHz
- 80% Phase Velocity
- Triple Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use

Description

The SMA male to RA SMA male 50 cm cable using LL142 coax, part number FMC00933/0002-50CM, 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 flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00933/0002-50CM SMA male to SMA male cable assembly operates to 18 GHz. The right angle SMA interface on the LL142 cable allows for easier connections in tight spaces. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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		18	GHz
VSWR			1.5:1	
Velocity of Propagation		80		%
Capacitance		25 [82.02]		pF/ft [pF/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.43	0.48	0.57	0.69	0.87	dB

Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector.

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Mechanical Specifications

Cable Assembly

Length	19.68 in [499.87 mm]
Width/Diameter	0.5 in [12.7 mm]
Weight	0.079 lbs [35.83 g]

Cable

Cable Type	LL142
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper Tape
Shield Layer 2	Aluminum Polyester
Shield Layer 3	Silver Plated Copper Wire
Jacket Material	FEP, Green
Jacket Diameter	0.195 in [4.95 mm]
Repeated Minimum Bend Radius	0.975 in [24.77 mm]

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Specification	MIL-STD-348	MIL-PRF-39012
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Mating Cycles	500	
Contact Material and Plating	Beryllium Copper, Gold over Nickel	Beryllium Copper, Gold over Nickel
Contact Plating Specification	50 µin minimum	50 µin minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 inch	5/16 Inch
Torque	7 in-lbs 0.79 Nm	5 in-lbs 0.57 Nm

Environmental Specifications

Operating Range Temperature	-55 to +165 deg C
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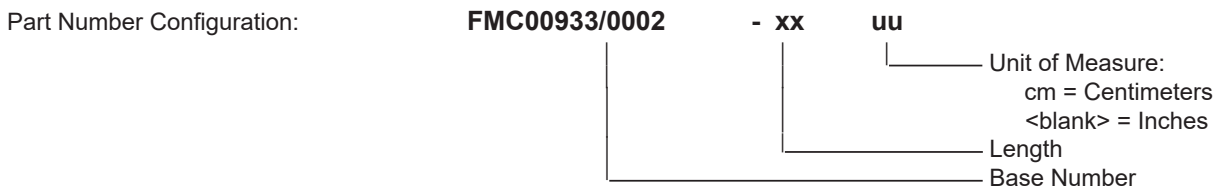
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order



Example: FMC00933/0002-12 = 12 inches long cable
FMC00933/0002-100cm = 100 cm long cable

Low Loss SMA Male to RA SMA Male Cable LL142 Coax in 50 cm 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.

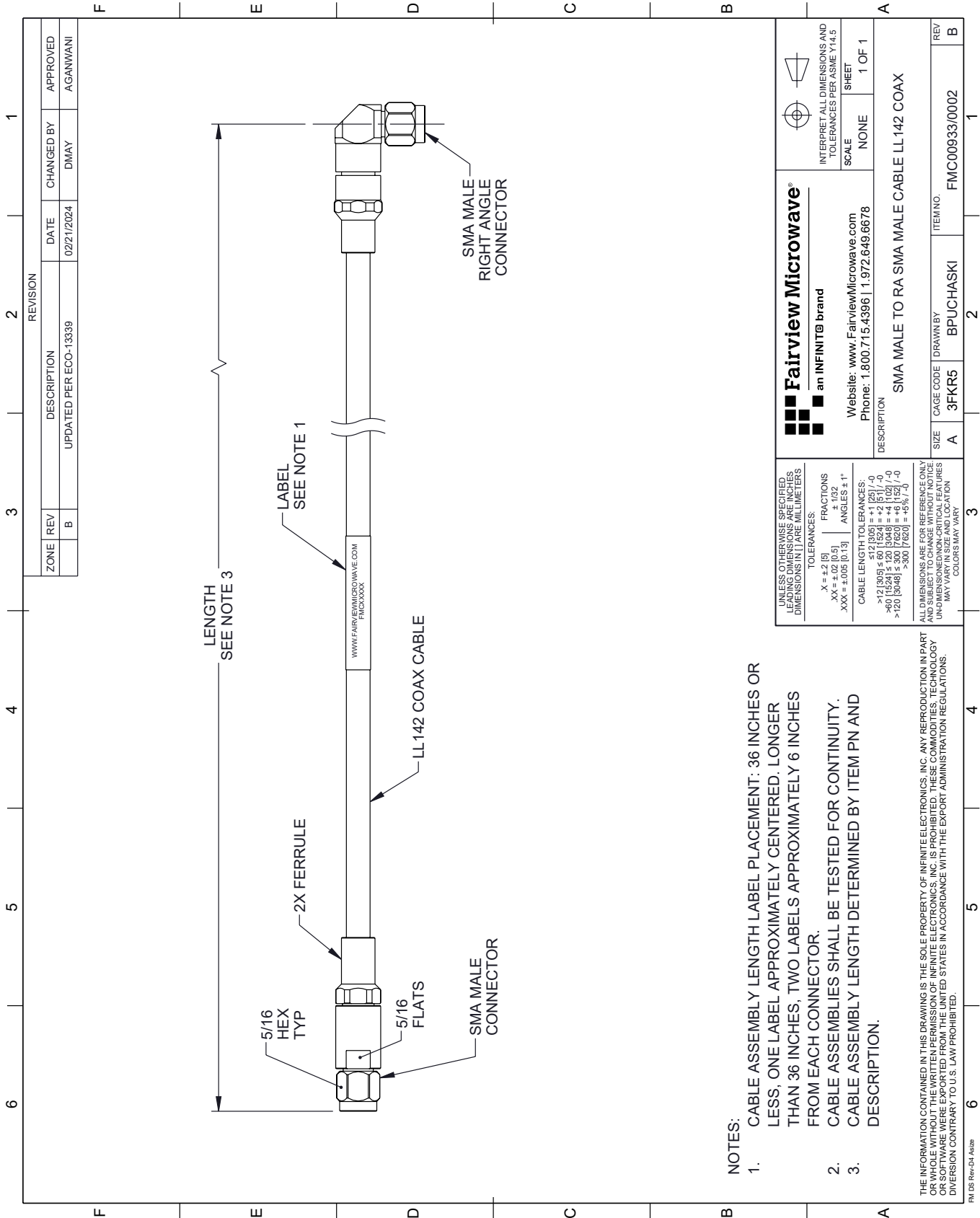
For additional information on this product, please click the following link: [Low Loss SMA Male to RA SMA Male Cable LL142 Coax in 50 cm FMC00933/0002-50CM](#)

URL: <https://www.fairviewmicrowave.com/low-loss-sma-male-to-ra-sma-male-cable-ll142-coax-fmc00933-0002-50cm-p.aspx>

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FMC00933/0002-50CM CAD Drawing

Low Loss SMA Male to RA SMA Male Cable LL142 Coax in 50 cm



 Fairview Microwave® an INFINIT® brand		INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678		SCALE: NONE SHEET: 1 OF 1
DESCRIPTION: SMA MALE TO RA SMA MALE CABLE LL142 COAX		
SIZE: A	CAGE CODE: 3FKR5	ITEM NO.: FMC00933/0002
DRAWN BY: BPUCHASKI	REV: 1	REV: B

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

TOLERANCES:

X = ±.2 [5] FRACTIONS ± 1/32

.XX = ±.02 [0.5] ANGLES ± 1°

.XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:

>12 [305] ≤ 60 [1524] = ±.1 [25] / -0

>60 [1524] ≤ 120 [3048] = ±.4 [102] / -0

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

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

- NOTES:
- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS; ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.

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FM DS Rev-D4 Alt2b