

FMCA1263-12 DATA SHEET

Low Loss RA SMA Male to SMA Female Cable LL142 Coax in 12 Inch with LF Solder

The RA SMA male to SMA female 12 inch cable using LL142 coax, part number FMCA1263-12, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to female 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 FMCA1263-12 SMA male to SMA female 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 of better than 95 dB. Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1263 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heatshrink booting which provides added strain relief while increasing the durability of the cable assembly. The low attenuation per foot in a 0.195 inch diameter cable creates a cable that has good flexibility while offering industry leading loss characteristics. All FMCA1263 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

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	Min Typ		Units	
Frequency Range	DC		18	GHz	
VSWR			1.4:1		
Return Loss			15.46	dB	
Insertion Loss			0.82	dB	
Velocity of Propagation		83		%	
RF Shielding	95			dB	
Capacitance		25 [82.02]	pF/ft [pF/m]		

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.52	0.56	0.62	0.71	0.82	dB
Insertion Loss (Typ.)	0.49	0.52	0.58	0.65	0.75	dB

Mechanical Specifications

Cable Assembly

Length*

12 in [304.8 mm]



Configuration:

- SMA Male Right Angle
- SMA Female
- LL142

Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- 100% RF Tested
- Custom lengths available

Applications:

- General Purpose
- Laboratory Use
- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

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 sales@fairviewmicrowave.com





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

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]

One Time Minimum Bend Radius

1 in [25.4 mm]

Connectors

Description	Connect	or 1	Connector 2	
Туре	SMA Ma	ale	SMA Female	
Specification	MIL-PRF-3	9012		
Impedance	50 Ohn	ns	50 Ohms	
Contact Material & Plating	Beryllium Cop	per, Gold	Beryllium Copper, Gold	1
Contact Plating Spec.	ASTM-B488, 50	Dμ In. MinA	STM-B488, 50µ In. Minin	num
Dielectric Type	PTFE		PTFE	
Outer Cond Material & Plati	ng		Passivated Stainless Ste	el
Outer Cond Plating Spec.			SAE-AMS-2700	
Body Material & Plating	Passivated Stair	nless Steel	Passivated Stainless Ste	el
Body Plating Spec.	SAE-AMS-	2700	SAE-AMS-2700	
Coupling Nut Material & Pla	iting Passivated Stair	nless Steel		
Coupling Nut Plating Spec.	SAE-AMS-	2700		
Hex Size	5/16 In	ch		
Torque	8 in-lbs 0.	9 Nm		

Environmental Specifications

Temperature

Operating Range -55 to +125 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

• Values at 25°C, sea level.

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How to Order

Part Number Configuration:	FMCA1263	- xx	uu	
				<pre>- cm = Centimeters <blank> = Inches</blank></pre>
				– Length

Example: FMCA1263-12 = 12 inches long cable

FMCA1263-100cm = 100 cm long cable

Low Loss RA SMA Male to SMA Female Cable LL142 Coax in 12 Inch 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 RA SMA Male to SMA Female Cable LL142 Coax in 12 Inch with LF Solder FMCA1263-12

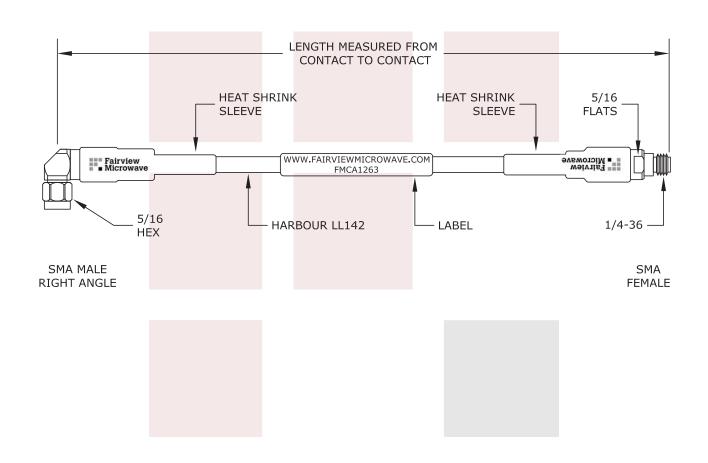
URL: https://www.fairviewmicrowave.com/low-loss-ra-sma-male-sma-female-cable-II142-coax-fmca1263-12-p.aspx

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.

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NOTE:

TABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. LONGER THAN 48" WILL BE 6" AWAY FROM CONNECTOR.

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].					
Low Loss RA SMA Male to SMA Female Cable LL142	DWG NO FMCA1263			CAGE CODE 3FKR5		
Coax in 12 Inch with LF Solder	CAD FILE 072216	SHEET	SCALE N	/A SIZE A	2233	