

Low Loss N Male to SMA Female Cable LL142 Coax and RoHS with LF Solder

Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1251 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heat-shrink 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 FMCA1251 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Return Loss	16.54			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.)	0.1 [0.33]	0.14 [0.46]	0.2 [0.66]	0.29 [0.95]	0.4 [1.31]	dB/ft [dB/m]
Insertion Loss (Typ.)	0.07 [0.23]	0.1 [0.33]	0.16 [0.52]	0.23 [0.75]	0.33 [1.08]	dB/ft [dB/m]

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.05dB x vFrequency (GHz) per connector.

Mechanical Specifications

Cable Assembly

Diameter	0.875 in [22.23 mm]
Weight	0.064 lbs [29.03 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]



Configuration:

- N Male
- SMA Female
- LL142

Features:

- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.35:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- RoHS and REACH Compliant
- 100% RF Tested
- Custom lengths available

Applications:

- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

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One Time Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Female
Polarity	Standard	Standard
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488, 50µ Inch.	ASTM-B488, 50µ In. Min
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating		Passivated Stainless Steel
Outer Cond Plating Spec.		SAE-AMS-2700
Coupling Nut Material & Plating	Passivated Stainless Steel	
Coupling Nut Plating Spec.	SAE-AMS-2700	
Hex Size	3/4 Inch	
Torque	14 in-lbs [1.58 Nm]	
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Spec.		SAE-AMS-2700

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.

How to Order

Part Number Configuration:

FMCA1251 - xx uu

cm = Centimeters
<blank> = Inches

Length

Example: FMCA1251-12 = 12 inches long cable
FMCA1251-100cm = 100 cm long cable

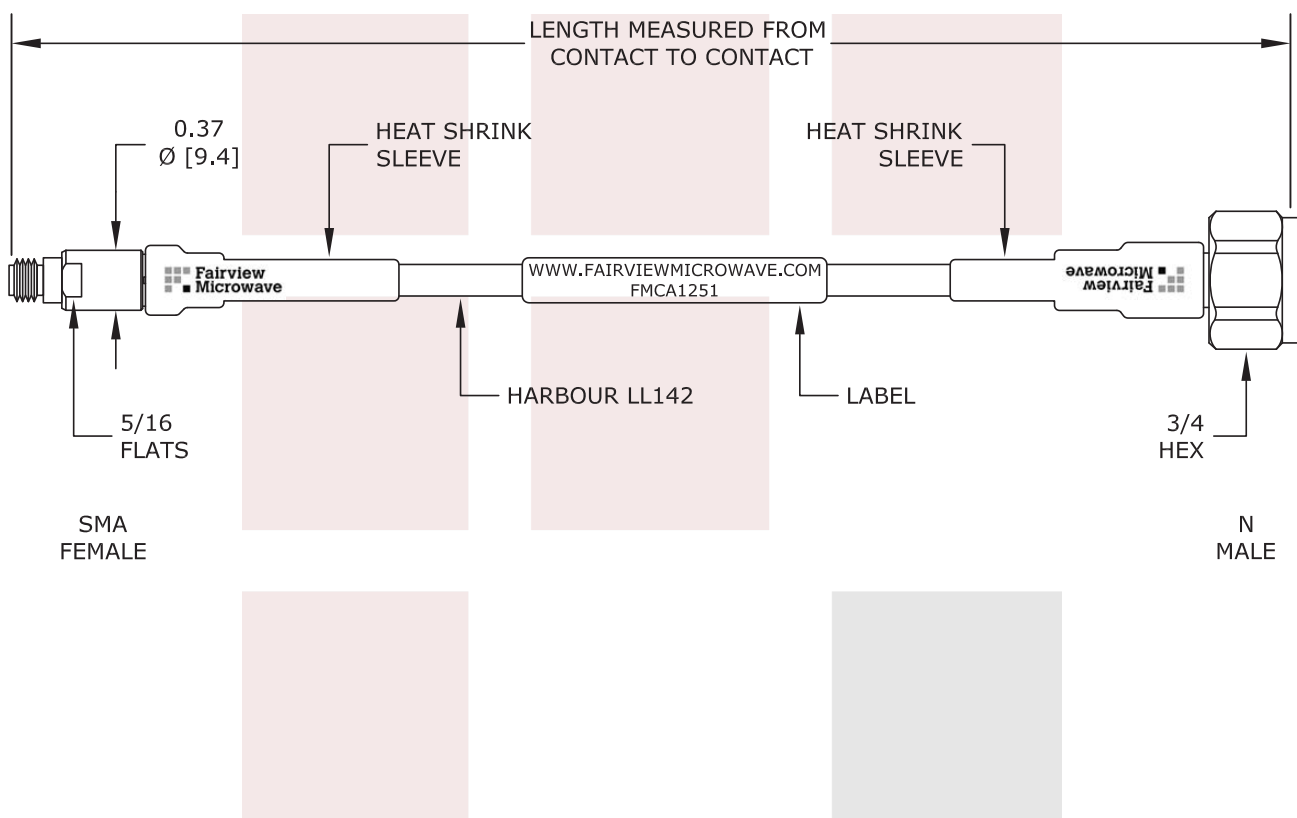
Low Loss N Male to SMA Female Cable LL142 Coax and RoHS with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss N Male to SMA Female Cable LL142 Coax and RoHS with LF Solder FMCA1251](https://www.fairviewmicrowave.com/low-loss-n-male-sma-female-cable-ll142-coax-fmca1251-p.aspx)

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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.





NOTE:

LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" AWAY FROM CONNECTOR.

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TITLE Low Loss N Male to SMA Female Cable LL142 Coax and RoHS with LF Solder	DWG NO FMCA1251		CAGE CODE 3FKR5		
	CAD FILE 072216	SHEET	SCALE N/A	SIZE A	2233