



# Low Loss SMA Male to N Male 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 FMCA1243 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 FMCA1243 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	Т	ур	Max	U	Inits
Frequency Range	DC			18		GHz
VSWR				1.35:1		
Return Loss	16.54					dB
Velocity of Propagation		3	33			%
RF Shielding	95					dB
Capacitance		25 [8	32.02]		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	0.14	0.2 0.29 0.4		dB/ft	
	[0.33]	[0.46]	[0.66]	[0.95]	[1.31]	[dB/m]
Insertion Loss (Typ.)	0.07	0.1	0.16	0.23	0.33	dB/ft
	[0.23]	[0.33]	[0.52]	[0.75]	[1.08]	[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 0.822 in [20.88 mm] 0.188 lbs [85.28 g] Weight

#### Cable

Cable Type **Impedance** Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter

LL142 50 Ohms Solid Copper, Silver

PTFF

Silver Plated Copper Tape Aluminum Polyester Silver Plated Copper Wire FEP, Green 0.195 in [4.95 mm]



# **Configuration:**

- SMA Male
- N Male
- LL142

### **Features:**

- 83% Velocity of Propagation
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.35:1 to</li> 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
Туре	SMA Male	N Male
Polarity	Standard	Standard
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488 50µ In. Min	ASTM-B488, 50µ in. minimul
Dielectric Type	PTFE	PTFE
Coupling Nut Material & Pla	ting Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 Inch	3/4 Inch
Torque	8 in-lbs [0.9 Nm]	14 in-lbs [1.58 Nm]
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2700

## **Environmental Specifications**

**Temperature** 

Operating Range

-55 to +125 deg C

**Compliance Certifications** (see product page for current document)

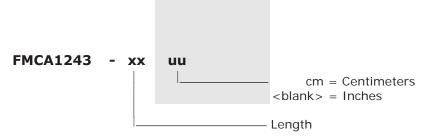
## **Plotted and Other Data**

Notes:

• Values at 25°C, sea level.

## **How to Order**

Part Number Configuration:



Example: FMCA1243-12 = 12 inches long cable

FMCA1243-100cm = 100 cm long cable





Low Loss SMA Male to N Male 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 SMA Male to N Male Cable LL142 Coax and RoHS with LF Solder FMCA1243

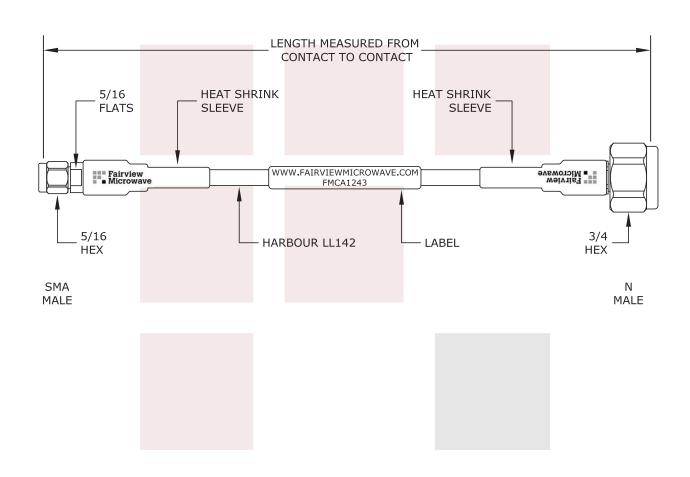
The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-n-male-cable-II142-coax-fmca1243-p.aspx

to implem	nent improvemen	ts. Fairview	v Microwa	ave reserve	es the righ	nt to mak	ke such	changes	as requi	red. Unle	ss ot	herwise
	l specifications a											
	of the part desc				purpose,	and Fair	rview M	licrowave	does no	t assume	any	liability
arising ou	t of the use of a	ny part or d	ocument	ation.								







#### NOTE: LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" 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 SMA Male to N Male Cable LL142 Coax and	DWG NO FMCA1243			CAGE CODE 3FKR5		
RoHS with LF Solder	CAD FILE 072116	SHEET	SCALI	E N/A	SIZE A	2233