

# FMCA1238-48 DATA SHEET

# Low Loss N Male to RA N Male Cable LL142 Coax in 48 Inch with LF Solder

The type N male to RA type N male 48 inch cable using LL142 coax, part number FMCA1238-48, from Fairview Microwave is in-stock and ships same day. This Fairview type N to type N 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 FMCA1238-48 type N male to type N male cable assembly operates to 18 GHz. The right angle type N 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 FMCA1238 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 FMCA1238 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**

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Description	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
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.)	0.82	0.98	1.22	1.58	2.02	dB
Insertion Loss (Typ.)	0.7	0.82	1.06	1.34	1.74	dB

#### **Mechanical Specifications**

**Cable Assembly** 

Length\* 48 in [121.92 cm] Weight 0.2 lbs [90.72 g]

Cable

Cable Type LL142



### **Configuration:**

- N Male
- N Male Right Angle
- 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 < 1.35:1 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

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Impedance
Inner Conductor Ty

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

50 Ohms Solid

Copper, Silver

PTFE 3

Silver Plated Copper Tape Aluminum Polyester Silver Plated Copper Wire

FEP, Green

0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

C	onne	ctors

Description	Connector 1	. C	onnector 2	
Туре	N Male		N Male	
Impedance	50 Ohms		50 Ohms	
Contact Material & Plating	Beryllium Copper,	Gold Beryll	lium Copper, Go	old
Contact Plating Spec.	ASTM-B488, 50μ I	nch. ASTM-B4	88, 50µ In. Min	imum
Dielectric Type	PTFE		PTFE	
Body Material & Plating	Passivated Stainless	Steel Passiva	ted Stainless S	teel
Body Plating Spec.	SAE-AMS-2700	S/	AE-AMS-2701	
Coupling Nut Material & Pla	ting Passivated Stainless	Steel Passiva	ited Stainless S	teel
Coupling Nut Plating Spec.	SAE-AMS-2700	S/	AE-AMS-2701	
Hex Size	3/4 Inch		3/4 Inch	
Torque	14 in-lbs 1.58 N	lm 14 i	n-lbs 1.58 Nm	1

**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: FMCA1238-12 = 12 inches long cable

FMCA1238-100cm = 100 cm long cable

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Low Loss N Male to RA N Male Cable LL142 Coax in 48 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 N Male to RA N Male Cable LL142 Coax in 48 Inch with LF Solder FMCA1238-48

The information contained in this document is accurate to the best of our knowledge and representative of the part

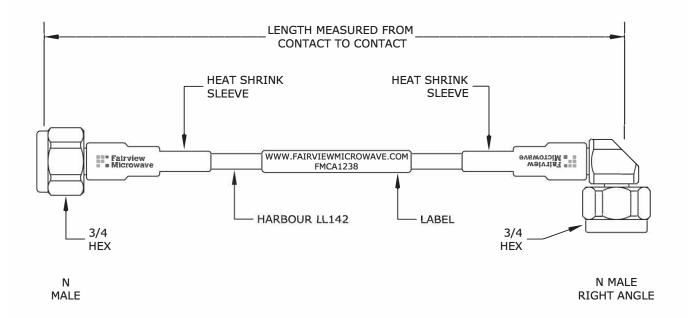
URL: https://www.fairviewmicrowave.com/low-loss-n-male-ra-n-male-cable-ll142-coax-fmca1238-48-p.aspx

described h	erein. It may be necessar	y to make	modifications to	the part and	d/or th	e documentation of	f the part,	in order
to impleme	nt improvements. Fairview	Microway	ve reserves the rig	to make	such c	hanges as required.	. Unless o	therwise
	specifications are nominal.							
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arising out	of the use of any part or do	ocumentat	tion.					

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#### NOTE:

LABEL 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 N Male to RA N Male Cable LL142 Coax in 48 Inch with LF Solder	DWG NO	FMCA1238			CAGE CODE 3FKR5		
	CAD FILE 072116	SHEET	SCALE	E N/A	SIZE A	2233	

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Fairview Microwave:

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