

## FMCA1246-36 DATA SHEET

# Low Loss RA N Male to RA N Male Cable LL142 Coax in 36 Inch with LF Solder

The RA type N male to RA type N male 36 inch cable using LL142 coax, part number FMCA1246-36, 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 FMCA1246-36 type N male to type N male cable assembly operates to 18 GHz. The right angle type N interfaces on the LL142 cable allow 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 FMCA1246 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 FMCA1246 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	Тур	Max	Units		
Frequency Range	DC		18	GHz		
VSWR			1.45:1			
Return Loss			14.72	dB		
Insertion Loss			1.62	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.)	0.72	0.84	1.02	1.29	1.62	dB
Insertion Loss (Typ.)	0.63	0.72	0.9	1.11	1.41	dB

### **Mechanical Specifications**

**Cable Assembly** 

Length\* Weight 36 in [914.4 mm] 1.14 lbs [517.1 g]



### **Configuration:**

- N Male Right Angle
- 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 < 1.45:1 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

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Cable

Cable Type LL142 Impedance 50 Ohms Inner Conductor Type Solid Inner Conductor Material and Plating

Copper, Silver

Dielectric Type PTFE Number of Shields

Shield Layer 1 Silver Plated Copper Tape Shield Layer 2 Aluminum Polyester Shield Layer 3 Silver Plated Copper Wire

Jacket Material FEP, Green

0.195 in [4.95 mm] Jacket Diameter

One Time Minimum Bend Radius 1 in [25.4 mm]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	N Male	N Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488, 50μ In.	MinASTM-B488, 50µ In. Minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Passivated Stainless S	Steel Passivated Stainless Steel
Body Plating Spec.	SAE-AMS-2701	SAE-AMS-2701
Coupling Nut Material & Pla	ting Passivated Stainless S	Steel Passivated Stainless Steel
Coupling Nut Plating Spec.	SAE-AMS-2701	SAE-AMS-2701
Hex Size	3/4 Inch	3/4 Inch
Torque	14 in-lbs 1.58 Nn	n 14 in-lbs 1.58 Nm

### **Environmental Specifications**

**Temperature** 

-55 to +125 deg C Operating Range

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

#### **Plotted and Other Data**

Notes:

· Values at 25°C, sea level.

### **How to Order**

FMCA1246 - xx Part Number Configuration: uu

cm = Centimeters <br/><br/>lank> = Inches - Length

Example: FMCA1246-12 = 12 inches long cable

FMCA1246-100cm = 100 cm long cable

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Low Loss RA N Male to RA N Male Cable LL142 Coax in 36 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 N Male to RA N Male Cable LL142 Coax in 36 Inch with LF Solder FMCA1246-36

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

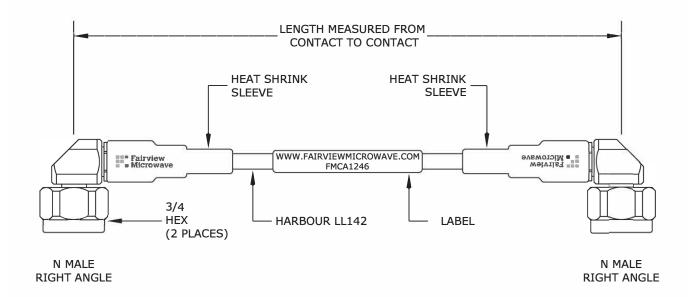
URL: https://www.fairviewmicrowave.com/low-loss-ra-n-male-ra-n-male-cable-II142-coax-fmca1246-36-p.aspx

described	herein. It may	y be necessar	y to ma	ke modificatio	ons to the part a	and/or t	he documentation of	of the part, in	order
to implem	ent improveme	ents. Fairview	Microw	ave reserves	the right to mak	e such	changes as required	d. Unless othe	erwise
							resentation or war		
					urpose, and Fair	view Mi	crowave does not a	assume any li	ability
arising ou	t of the use of	any part or do	ocument	ation.					

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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 RA N Male to RA N Male Cable LL142 Coax in	DWG NO FMCA1246			CAGE CODE 3FKR5		
36 Inch with LF Solder	CAD FILE 072116	SHEET	SCAL	E N/A	SIZE A	2233