

Low Loss N Female Bulkhead to N Female Bulkhead 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 FMCA1247 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 FMCA1247 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.



Configuration:

- N Female Bulkhead
- N Female Bulkhead
- LL142

Features:

- 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
- RoHS and REACH Compliant
- 100% RF Tested
- Custom lengths available

Applications:

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

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss	15.56			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 0.188 lbs [85.28 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]

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One Time Minimum Bend Radius 1 in [25.4 mm]

Connectors

Description	Connector 1	Connector 2
Type	N Female	N Female
Polarity	Standard	Standard
Mount Method	Bulkhead	Bulkhead
Specification	MIL-STD-348	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. Min
Dielectric Type	PEI	PEI
Outer Cond Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Outer Cond Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
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

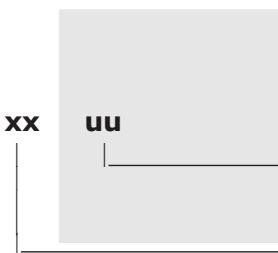
Notes:

- Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA1247 - xx uu



cm = Centimeters
 <blank> = Inches

Example: FMCA1247-12 = 12 inches long cable
 FMCA1247-100cm = 100 cm long cable

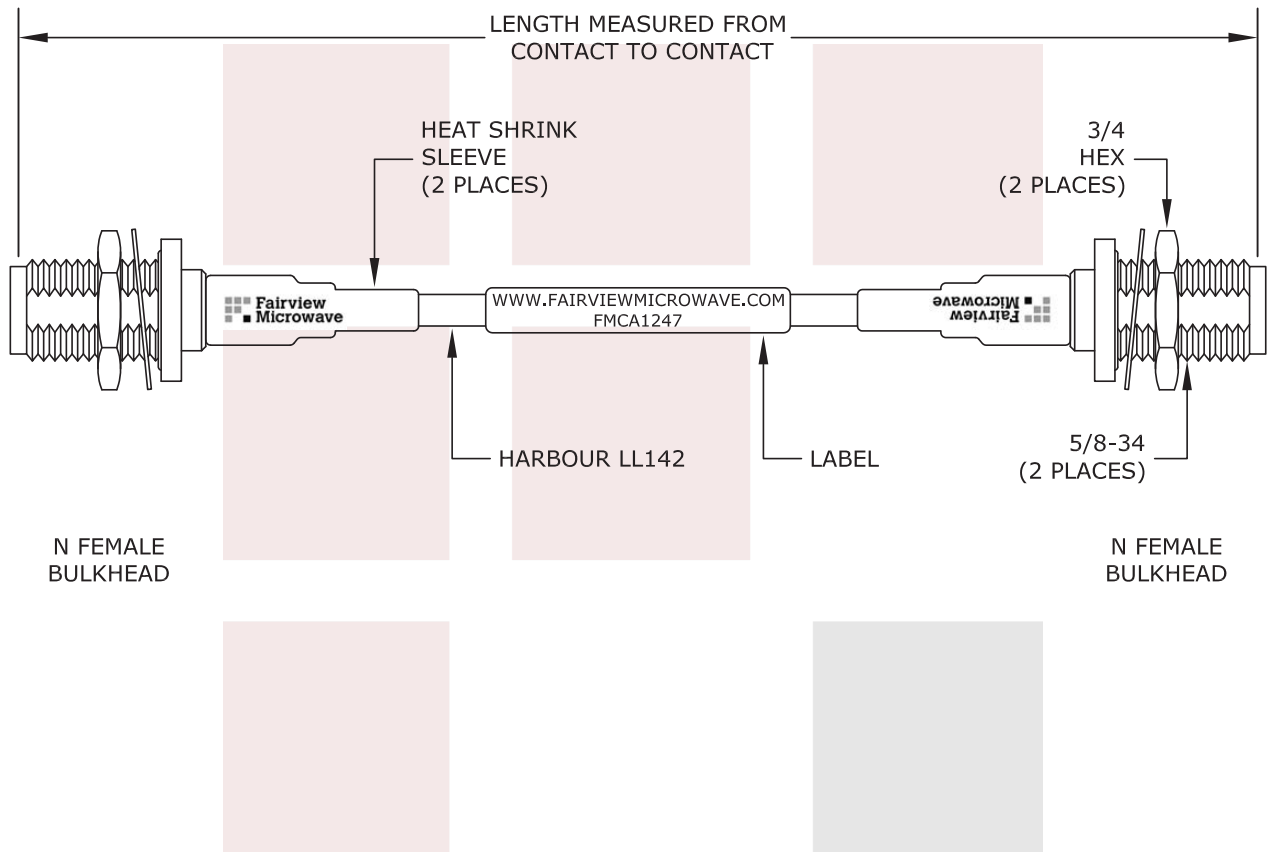
Low Loss N Female Bulkhead to N Female Bulkhead Cable LL142 Coax and RoHS with LF Solder from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss N Female Bulkhead to N Female Bulkhead Cable LL142 Coax and RoHS with LF Solder FMCA1247](#)

URL: <https://www.fairviewmicrowave.com/low-loss-n-female-n-female-cable-ll142-coax-fmca1247-p.aspx>

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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].			
TITLE Low Loss N Female Bulkhead to N Female Bulkhead Cable LL142 Coax and RoHS with LF Solder		DWG NO FMCA1247		CAGE CODE 3FKR5	
CAD FILE	072116	SHEET		SCALE	N/A
				SIZE	A
					2233