

# FMCA1260 DATA SHEET

# Low Loss SMA Male to N Female Bulkhead Cable LL142 Coax with LF Solder

The SMA male to type N female bulkhead cable using LL142 coax, part number FMCA1260, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to female 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 FMCA1260 SMA male to type N female cable assembly operates to 18 GHz. Our RF cable assembly with type N bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. 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 FMCA1260 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 FMCA1260 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			1.4:1		
Return Loss			15.56	dB	
Insertion Loss			0.4	dB	
			1.31	dB	
Velocity of Propagation		83		%	
RF Shielding	95	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	0.14	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



## **Configuration:**

- SMA Male
- N Female Bulkhead
- 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 < 1.40:1 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 www.fairviewmicrowave.com sales@fairviewmicrowave.com





**Electrical Specification Notes:** 

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

#### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 0 in [0 mm]

Cable

Cable Type LL142 50 Ohms Impedance 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	Connect	or 1	Connector 2	
Туре	SMA Ma	ale	N Female	
Mount Method			Bulkhead	
Specification	MIL-STD-	348	MIL-STD-348	
Impedance	50 Ohr	ns	50 Ohms	
Contact Material & Plating	Beryllium Cop	per, Gold	Beryllium Copper, Gol	ld
Contact Plating Spec.	ASTM-B488 50	)μ In. Min A	STM-B488, 50µ In. Mini	mun
Dielectric Type	PTFE		PEI	
Outer Cond Material & Plat	ing		Passivated Stainless St	eel
Outer Cond Plating Spec.			SAE-AMS-2700	
Body Material & Plating	Passivated Stair	nless Steel	Passivated Stainless St	eel
Body Plating Spec.	SAE-AMS-	2700	SAE-AMS-2700	
Coupling Nut Material & Pla	ting Passivated Stair	nless Steel		
Coupling Nut Plating Spec.	SAE-AMS-	2700		
Hex Size	5/16 In	ch		
Torque	8 in-lbs 0.	9 Nm		

#### **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.

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### **How to Order**

Part Number Configuration:	FMCA1260	- xx	uu	
				cm = Centimeters <blank> = Inches Length</blank>

Example: FMCA1260-12 = 12 inches long cable

FMCA1260-100cm = 100 cm long cable

Low Loss SMA Male to N Female Bulkhead Cable LL142 Coax 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 SMA Male to N Female Bulkhead Cable LL142 Coax with LF Solder FMCA1260

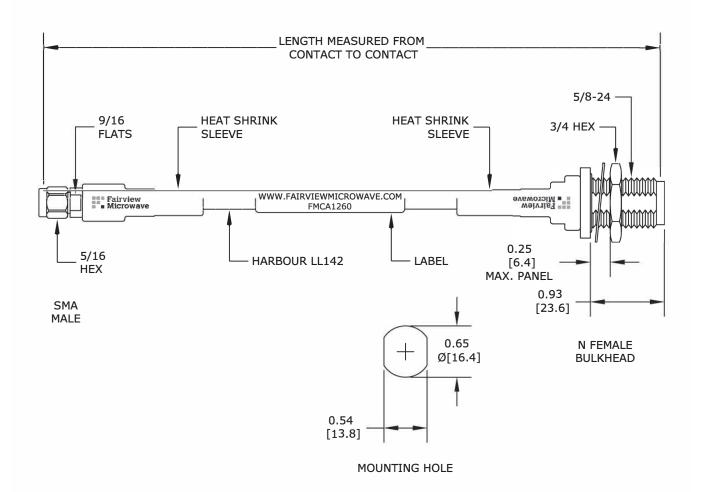
URL: https://www.fairviewmicrowave.com/low-loss-sma-male-n-female-cable-ll142-coax-fmca1260-p.aspx

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.

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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 SMA Male to N Female Bulkhead Cable LL142 Coax with LF Solder	FMCA1260			CAGE CODE 3FKR5		
	CAD FILE 072216	SHEET	SCAL	E N/A	SIZE A	2233