

## Low Loss Test SMA Male to N Female Bulkhead Cable LL335i Coax in 12 Inch

The SMA male to type N female bulkhead 12 inch cable using LL335i coax, part number FMCA1294-12, 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 LL335i coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1294-12 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. The FMCA1294 high performance test cable's 0.3 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All FMCA1294 cable assemblies are 100% continuity and RF tested to published specifications. Custom lengths are built to order and shipped same day.

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	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
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.)	0.26	0.28	0.32	0.38	0.46	dB
Insertion Loss (Typ.)	0.25	0.27	0.3	0.35	0.42	dB
Power Handling (Max.)	1,800	1,200	900	650	400	W

### Mechanical Specifications

#### Cable Assembly

Length\*

12 in [304.8 mm]



### Configuration:

- SMA Male
- N Female Bulkhead
- LL335i

### Features:

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation
- Shielding effectiveness 95 Db
- Maximum VSWR is 1.40:1 to 18 GHz
- Minimum Bend Radius of 1.5 inches
- Operating Temperature range of -55 to +125°C
- Same day shipment of custom lengths
- 100% Continuity and RF tested

### Applications:

- General Purpose
- Test & Measurement
- Laboratory Use
- General Purpose
- Test & Measurement
- Laboratory Use

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](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**Cable**

Cable Type	LL335i
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	0.3 in [7.62 mm]

Repeated Minimum Bend Radius	1.5 in [38.1 mm]
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**Connectors**

Description	Connector 1	Connector 2
Type	SMA Male	N Female
Mount Method		Bulkhead
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Mating Cycles		500
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold over Nickel
Contact Plating Spec.	ASTM-B488 50 $\mu$ In.	50 $\mu$ in minimum
Dielectric Type	PTFE	PEI
Outer Cond Material & Plating		Passivated Stainless Steel
Outer Cond Plating Spec.		SAE-AMS-2700
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material & Plating	Passivated Stainless Steel	
Coupling Nut Plating Spec.	SAE-AMS-2700	
Hex Size	5/16 Inch	
Torque	8 in-lbs 0.9 Nm	20 in-lbs 2.26 Nm

**Environmental Specifications**
**Temperature**

Operating Range	-55 to +165 deg C
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**Compliance Certifications** (see [product page](#) for current document)

**Plotted and Other Data**

Notes:

## How to Order

Part Number Configuration:

**FMCA1294 - xx uu**

Length  
cm = Centimeters  
<blank> = Inches

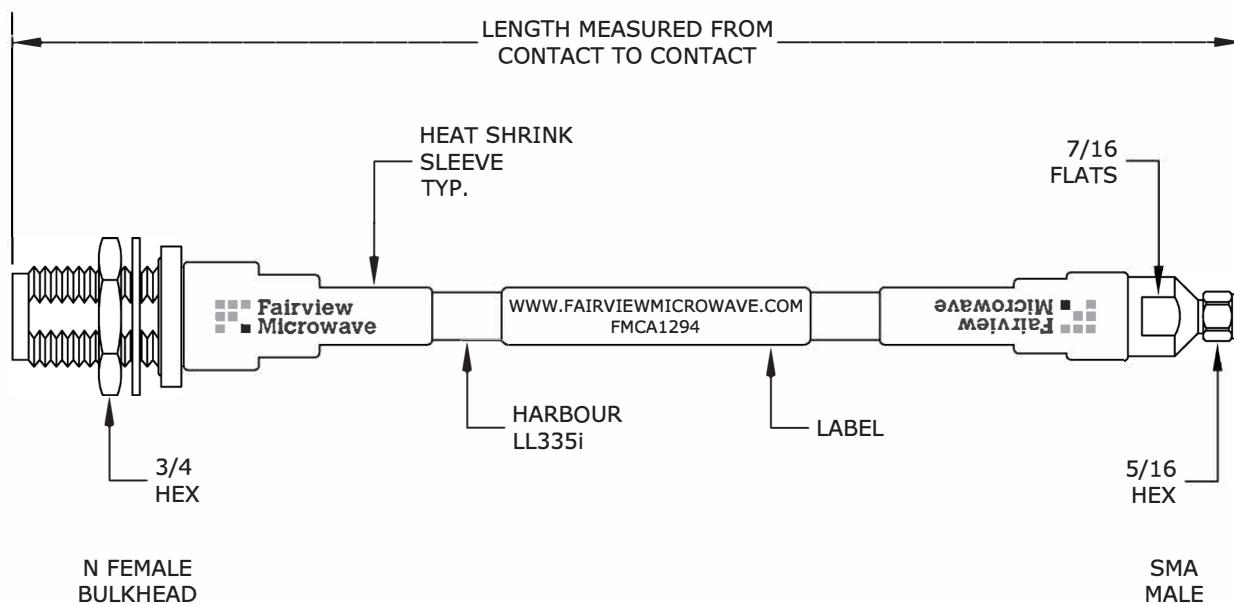
Example: FMCA1294-12 = 12 inches long cable  
FMCA1294-100cm = 100 cm long cable

Low Loss Test SMA Male to N Female Bulkhead Cable LL335i Coax in 12 Inch 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 Test SMA Male to N Female Bulkhead Cable LL335i Coax in 12 Inch FMCA1294-12](#)

URL: <https://www.fairviewmicrowave.com/low-loss-test-sma-male-n-female-cable-ll335i-coax-fmca1294-12-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.



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](http://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 Test SMA Male to N Female Bulkhead Cable  
LL335i Coax in 12 Inch

DWG NO	CAGE CODE					
FMCA1294	3FKR5					
CAD FILE	122016	SHEET	SCALE	N/A	SIZE A	2233