

FMCA1294 DATA SHEET

Low Loss Test SMA Male to N Female Bulkhead Cable LL335i Coax

The SMA male to type N female bulkhead cable using LL335i coax, part number FMCA1294, 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 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	Тур	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.)	0.06	0.08	0.12	0.18	0.26	dB/ft
	0.2	0.26	0.39	0.59	0.85	dB/m
Insertion Loss (Typ.)	0.05	0.07	0.1	0.15	0.22	dB/ft
	0.16	0.23	0.33	0.49	0.72	dB/m
Power Handling (Max.)	1,800	1,200	900	650	400	W

Electrical Specification Notes:



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 sales@fairviewmicrowave.com





Power handling values are calculated based on Cable properties. Power handling will vary based on the actual VSWR of the cable assembly. Insertion Loss does not include the loss of the connectors, insertion loss is estimated as .1dB per connector.

Mechanical Specifications

Cable Assembly Length*		0 in [0 mm]				
Cable Cable Type Impedance Inner Conductor Type Inner Conductor Materi Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Shield Layer 3 Jacket Material Jacket Diameter	al and Plating	LL335i 50 Ohms Solid Copper, Silver PTFE 3 Silver Plated Copper Taj Aluminum Polyester Silver Plated Copper Wi FEP, Green 0.3 in [7.62 mm]				
Repeated Minimum Ber	nd Radius	1.5 in [38.1 mm]				

Connectors

Description	Connect	or 1	Connector 2
Туре	SMA M	ale	N Female
Mount Method			Bulkhead
Specification	MIL-STD	-348	MIL-STD-348
mpedance	50 Ohr	ns	50 Ohms
Mating Cycles			500
Contact Material & Plating	Beryllium Cop	per, GoldBe	eryllium Copper, Gold over
Contact Plating Spec.	ASTM-B488	50µ In.	50 µin minimum
ielectric Type	PTFE		PEI
outer Cond Material & Plat	ing		Passivated Stainless Stee
uter Cond Plating Spec.			SAE-AMS-2700
ody Material & Plating	Passivated Stai	nless Steel	Passivated Stainless Stee
ody Plating Spec.	SAE-AMS-	2700	SAE-AMS-2700
Coupling Nut Material & Pla	ating Passivated Stai	nless Steel	
Coupling Nut Plating Spec.	SAE-AMS-	-2700	
lex Size	5/16 Ir	nch	
ōrque	8 in-lbs 0.	.9 Nm	20 in-lbs 2.26 Nm

Environmental Specifications

Temperature

Operating Range

-55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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How to Order

Part Number Configuration:

FMCA1294 - xx



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 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 FMCA1294

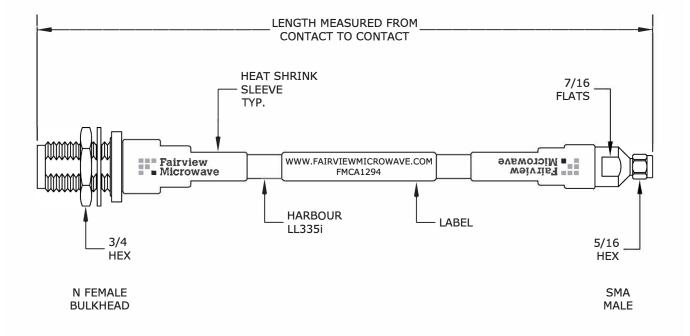
URL: https://www.fairviewmicrowave.com/low-loss-test-sma-male-n-female-cable-ll335i-coax-fmca1294-p.aspx

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.	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].					
^{□□TLE} Low Loss Test SMA Male to N Female Bulkhead Cab	DWG NO FMCA1294			CAGE CODE 3FKR5		
LL335i Coax	CAD FILE 122016	SHEET	SCAL	E N/A	SIZE A	2233

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