

## Low Loss Test RA SMA Male to RA N Male Cable LL335i Coax

The RA SMA male to RA type N male cable using LL335i coax, part number FMCA1297, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to type N cable assembly has a male to male 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 FMCA1297 SMA male to type N male cable assembly operates to 18 GHz. The right angle SMA and right angle type N interfaces on the LL335i 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. The FMCA1297 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 FMCA1297 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.)	0.06	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 Right Angle
- N Male Right Angle
- 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

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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 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]

### Connectors

Description	Connector 1	Connector 2
Type	SMA Male	N Male
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488 50µ In.	ASTM-B488
Dielectric Type	PTFE	PTFE
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	Passivated Stainless Steel
Coupling Nut Plating Spec.	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 Inch	
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:

**How to Order**

Part Number Configuration:

**FMCA1297 - xx uu**



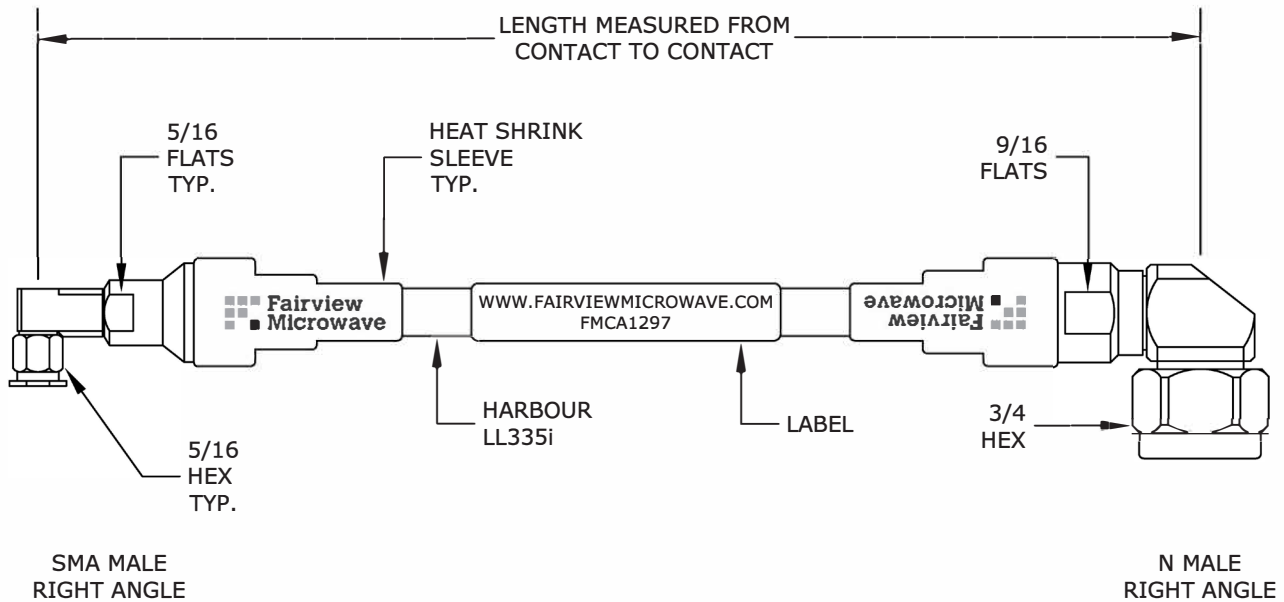
Example: FMCA1297-12 = 12 inches long cable  
FMCA1297-100cm = 100 cm long cable

Low Loss Test RA SMA Male to RA N Male 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 RA SMA Male to RA N Male Cable LL335i Coax FMCA1297](#)

URL: <https://www.fairviewmicrowave.com/low-loss-test-ra-sma-male-ra-n-male-cable-ll335i-coax-fmca1297-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 .

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TITLE Low Loss Test RA SMA Male to RA N Male Cable LL335i Coax		DWG NO <b>FMCA1297</b>		CAGE CODE <b>3FKR5</b>	
CAD FILE	122016	SHEET	SCALE	N/A	SIZE A 2233