Fairview Microwave
an INFINITE brand

FMCA1721-200CM
DATA SHEET

Low Loss RA N Male to RA SMA Male Cable LL160 Coax

The RA N Male to RA SMA Male low loss cable using LL160 coax, part number FMCA1721-200CM, from Fairview Microwave is in-stock and ships same day. This N to SMA low loss cable assembly features a 82.5% velocity dielectric manufactured from expanded PTFE tape. This microporous dielectric contributes to the low loss and phase stability of the cables. Our triple shielded coaxial cable construction of Fairview's low loss LL160 provides shielding levels as high as 95 dB. The precision connections are constructed with stainless steel bodies and high temperature insulators, supporting a wide range of temperature from -55 to +165 degrees C. This solid combination of connectors and low loss coax are further enhanced with the addition of heavy-duty heat shrink for improved strain relief for this superior quality RF cable assembly.

Fairview's RA N Male to RA SMA Male low loss cable FMCA1721-200CM datasheet, specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and high speed digital connections allows designers to configure and customize their signals however they like. From reducing losses or improving phase stability, Fairview microwave has the right low loss cable solutions to meet your needs.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.35:1	
Velocity of Propagation		82.5		%
RF Shielding	-90			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 (Typ.)	0.8	1.14	1.73	2.49	3.61	dB

Electrical Specification Notes:
The Insertion Loss data above is based on the performance specifications of the coax cable used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.04*SQRT(F(GHz))dB maximum for the SMA right angle connector and 0.10*SQRT(F(GHz))dB maximum for the N right angle connector.

Mechanical Specifications

Cable Assembly

Cable

Cable Type	LL160
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3

Configuration:

- N Male Right Angle
- SMA Male Right Angle
- LL160

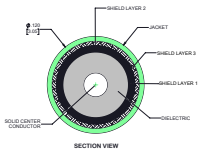
Features:

- Max Frequency 18 GHz
- Shielding Effectivity > -90 dB
- 82.5% Phase Velocity
- Triple Shielded
- FEP Jacket
- Low VSWR of 1.35:1 to 18 GHz
- -55 to +150 Temperature Range
- Expanded PTFE Tape Dielectric
- Same Day Shipment of Custom Lengths

Applications:

- General Purpose
- Laboratory Use
- Automated Test Systems
- Military Electronics
- Phased Array Antennas
- RF Countermeasures

Cable Diagram:



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Shield Layer 1	Silver Plated Copper
Shield Layer 2	Aluminum Polyester
Shield Layer 3	Silver Plated Copper
Jacket Material	FEP
Jacket Diameter	0.16 in [4.06 mm]
Repeated Minimum Bend Radius	0.8 in [20.32 mm]

Connectors

Description	Connector 1	Connector 2
Type	N Male	SMA Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488	ASTM-B488
Dielectric Type	PTFE	PTFE
Body Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Material & Plating	Passivated Stainless Steel	Passivated Stainless Steel

Environmental Specifications

Temperature

Operating Range -55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

How to Order

Part Number Configuration: **FMCA1721 - xx uu**

- uu: cm = Centimeters; <blank> = Inches
- xx: Length

Example: FMCA1721-12 = 12 inches long cable
FMCA1721-100cm = 100 cm long cable

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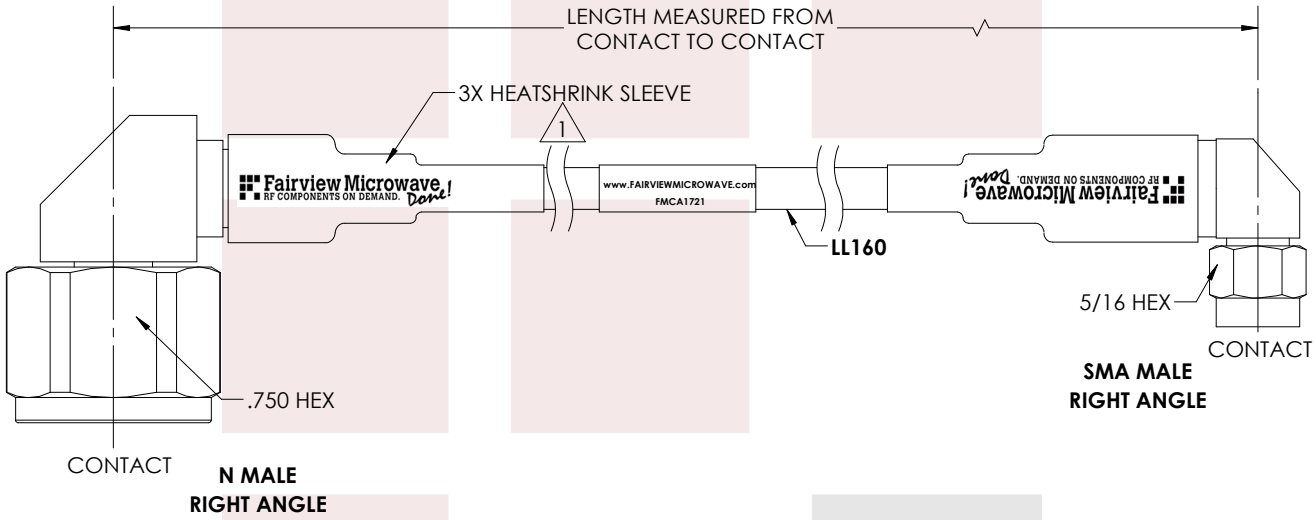
Low Loss RA N Male to RA SMA Male Cable LL160 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low Loss RA N Male to RA SMA Male Cable LL160 Coax FMCA1721-200CM

URL: https://www.fairviewmicrowave.com/low-loss-ra-n-male-ra-sma-male-cable-ll160-coax-fmca1721-200cm-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.



NOTES:
1. BLACK HEAT SHRINK WITH WHITE MARKINGS 3 PLACES.

STANDARD TOLERANCES
.X ±0.2
.XX ±0.01
.XXX ±0.005

*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

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 RA N Male to RA SMA Male Cable LL160 Coax	DWG NO FMCA1721		CAGE CODE 3FKR5	
	CAD FILE 07/18/18	SHEET	SCALE N/A SIZE A	CN2379

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