

## FMCA1716-60 DATA SHEET

# Low Loss N Female Bulkhead to RA SMA Male Cable LL160 Coax in 60 Inch

The N Female Bulkhead to RA SMA Male low loss cable using LL160 coax, part number FMCA1716-60, 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 N Female Bulkhead to RA SMA Male low loss cable FMCA1716-60 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	T	ур	Max	ι	Jnits
Frequency Range	DC			18		GHz
VSWR				1.35:1		
Velocity of Propagation		82.5			%	
RF Shielding	-90					dB
Capacitance		25 [8	32.02]		pF/f	t [pF/m]

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.58	0.83	1.26	1.82	2.64	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 per connector.

## **Mechanical Specifications**

## **Cable Assembly**

Length\* 60 in [152.4 cm] Weight 2.2 lbs [997.9 g]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields

LL160
So Ohms
Copper, Silver
PTFE
3



## **Configuration:**

- N Female Bulkhead
- SMA Male Right Angle
- LL160

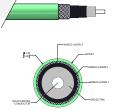
## **Features:**

- 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:**



Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

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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	Connecto	Connector 2		
Туре	N Female	SMA Mal	SMA Male		
Mount Method	Bulkhead				
Impedance	50 Ohms	50 Ohms	S		
Contact Material & Plating	Beryllium Copper, G	iold Beryllium Coppe	er, Gold		
Contact Plating Spec.	ASTM-B488	ASTM-B48	38		
Dielectric Type	PTFE	PTFE			
Outer Cond Material & Plat	ing Passivated Stainless	Steel			
Body Material & Plating	Passivated Stainless	Steel Passivated Stainle	ess Steel		
Coupling Nut Material & Pla	ating	Passivated Stainless Steel			

## **Environmental Specifications**

Temperature

Operating Range -55 to +165 deg C

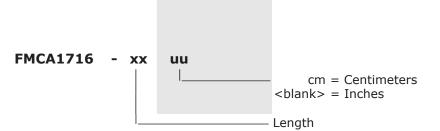
**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

**How to Order** 

Part Number Configuration:



Example: FMCA1716-12 = 12 inches long cable

FMCA1716-100cm = 100 cm long cable

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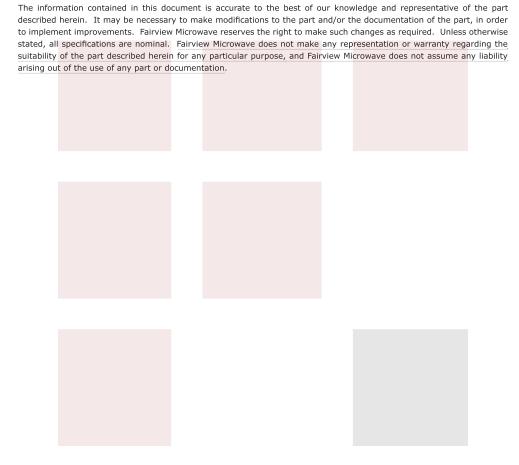




Low Loss N Female Bulkhead to RA SMA Male Cable LL160 Coax in 60 Inch from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low Loss N Female Bulkhead to RA SMA Male Cable LL160 Coax in 60 Inch FMCA1716-60

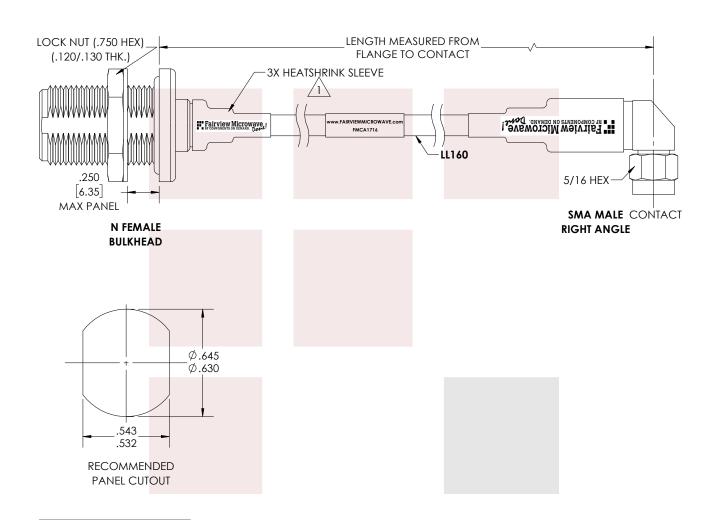
URL: https://www.fairviewmicrowave.com/low-loss-n-female-ra-sma-male-cable-ll160-coax-fmca1716-60-p.aspx



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STANDARD TOLERANCES
.X ±0.2

.XX ±0.01 .XXX ±0.005

ONLY TO DIMENSIONS IN INCHES

#### NOTES:

\*STANDARD TOLERANCES APPLY 1. BLACK HEAT SHRINK WITH WHITE MARKINGS 3 PLACES.

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 N Female Bulkhead to RA SMA Male Cable LL160 Coax in 60 Inch	DWG NO FMCA1716			CAGE CODE 3FKR5		
	CAD FILE 07/18/18	SHEET	SCAL	LE N/A SIZE A	CN2379	