

FMCA1708-50CM DATA SHEET

Low Loss N Male to RA TNC Male Cable LL160 Coax in 50 CM

The N Male to RA TNC Male low loss cable using LL160 coax, part number FMCA1708-50CM, from Fairview Microwave is in-stock and ships same day. This N to TNC 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 Male to RA TNC Male low loss cable FMCA1708-50CM 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 | Ту | р Мах | Units |
|-------------------------|-----|--------|-------|--------------|
| Frequency Range | DC | | 18 | GHz |
| VSWR | | | 1.5:1 | |
| 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.) | 0.3 | 0.43 | 0.66 | 0.94 | 1.35 | 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 straight connector and 0.10*SQRT(F(GHz))dB maximum for the right angle connector.

Mechanical Specifications

Cable Assembly

Length* 19.69 in [500.13 mm]

Cable

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

LL160 50 Ohms Solid Copper, Silver PTFE 3



Configuration:

- N Male
- TNC Male Right Angle
- LL160

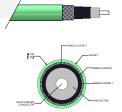
Features:

- Max Frequency 18 GHz
- Shielding Effectivity > -90 dB
- 82.5% Phase Velocity
- Triple Shielded
- FEP Jacket
- Low VSWR of 1.5:1 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 | Connector 2 | |
|-----------------------------|---------------------------------|----------------------------|--|
| Туре | N Male | TNC 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 & Pla | ting 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:

FMCA1708 - xx uu | cm = Centimeters | chlank> = Inches | Length

Example: FMCA1708-12 = 12 inches long cable FMCA1708-100cm = 100 cm long cable





Low Loss N Male to RA TNC Male Cable LL160 Coax in 50 CM 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 Male to RA TNC Male Cable LL160 Coax in 50 CM FMCA1708-50CM

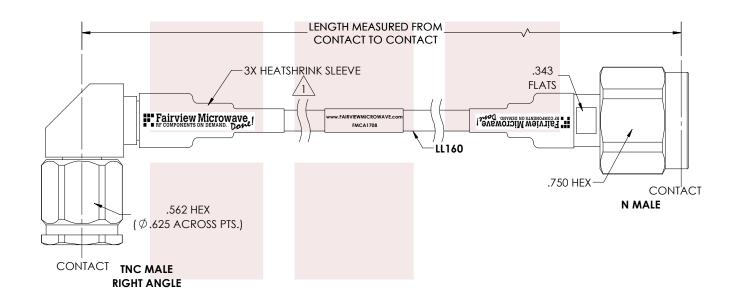
URL: https://www.fairviewmicrowave.com/low-loss-n-male-ra-tnc-male-cable-II160-coax-fmca1708-50cm-p.aspx



301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689







NOTES:

 BLACK HEAT SHRINK WITH WHITE MARKINGS 3 PLACES.

STANDARD TOLERANCES .X ±0.2

.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]. | | | | | |
|---|---|-------|------|-----------------|--------|--|
| Low Loss N Male to RA TNC Male Cable LL160 Coax i | DWG NO FMCA1708 | | | CAGE CODE 3FKR5 | | |
| 50 CM | CAD FILE 07/18/18 | SHEET | SCAL | E N/A SIZE A | CN2379 | |