Fairview Microwave
an INFINITE brand

FMCA1699-48
DATA SHEET

Low Loss SMA Male to RA TNC Male Cable
LL160 Coax in 48 Inch

The SMA Male to RA TNC Male low loss cable using LL160 coax, part number FMCA1699-48, from Fairview Microwave is in-stock and ships same day. This SMA 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 SMA Male to RA TNC Male low loss cable FMCA1699-48 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			1.5:1	
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.)	0.54	0.77	1.17	1.68	2.43	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*	48 in [121.92 cm]

Cable

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

Configuration:

- SMA Male
- TNC Male Right Angle
- LL160

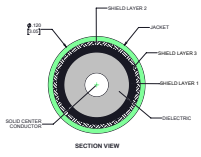
Features:

- 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:



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Number of Shields	3
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	SMA Male Threaded	TNC Male Threaded
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

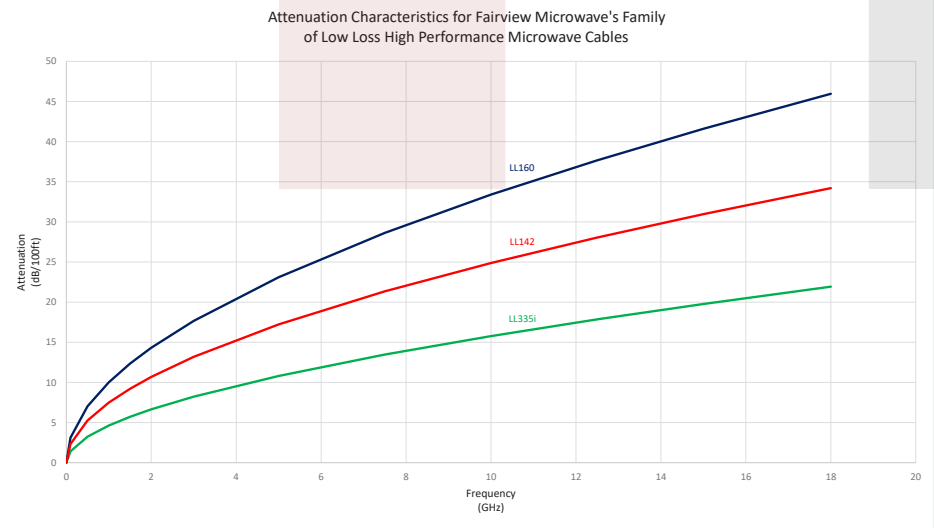
Operating Range -55 to +165 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

Typical Performance Data



How to Order

Part Number Configuration: **FMCA1699 - xx uu**

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

Example: FMCA1699-12 = 12 inches long cable
FMCA1699-100cm = 100 cm long cable

Low Loss SMA Male to RA TNC Male Cable LL160 Coax in 48 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 SMA Male to RA TNC Male Cable LL160 Coax in 48 Inch FMCA1699-48

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-ra-tnc-male-cable-ll160-coax-fmca1699-48-p.aspx