

Plenum Low Loss TNC Male to TNC Male Cable LMR-600-LLPX Coax with Times Microwave Components



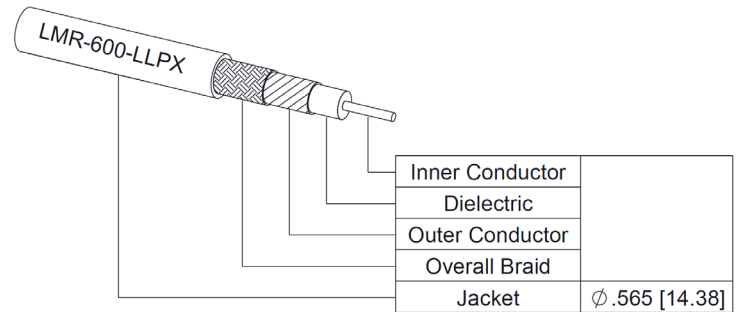
FMCA100054

Configuration

- Connector 1: TNC Male
- Connector 2: TNC Male
- Cable Type: LMR-600-LLPX

Features

- Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Fluoropolymer Jacket
- 500 Mating Cycles



Applications

- General Purpose
- Laboratory Use

Description

The TNC male to TNC male cable using LMR-600-LLPX coax, part number FMCA100054, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to TNC cable assembly has a male to male gender configuration with 50 ohm LMR-600-LLPX coax. The FMCA100054 TNC male to TNC male cable assembly operates to 6 GHz.

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	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	90			dB
DC Resistance Inner Conductor		0.73 [2.4]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		1.2 [3.94]		Ohms/1000ft [Ohms/Km]
Operating Voltage (DC)			4,000	Vdc
Jacket Spark			8,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency	250	500	1000	2500	6000	
FMCA100054	Custom Lengths Available	Insertion Loss (Typ.)	0.012	0.018	0.027	0.044	0.072	dB/ft	
			0.04	0.06	0.09	0.15	0.24	dB/m	
FMCA100054-12	12 Inch	Insertion Loss (Typ.)	0.22	0.22	0.23	0.25	0.28	dB	0.275
FMCA100054-24	24 Inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.29	0.35	dB	0.311
FMCA100054-36	36 Inch	Insertion Loss (Typ.)	0.24	0.26	0.29	0.34	0.42	dB	0.346
FMCA100054-48	48 Inch	Insertion Loss (Typ.)	0.25	0.28	0.31	0.38	0.49	dB	0.381
FMCA100054-60	60 Inch	Insertion Loss (Typ.)	0.26	0.29	0.34	0.42	0.56	dB	0.416

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.275 pounds
 Additional Weight per Inch: 1.5192 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter 0.5 in [12.7 mm]
 Weight 0.275 lbs [124.74 g]

Cable

Cable Type LMR-600-LLPX
 Impedance 50 Ohms
 Inner Conductor Type Stranded
 Inner Conductor Material and Plating Copper Clad Aluminum
 Dielectric Type PTFE
 Outer Conductor 1 Material and Plating Aluminum Tape
 Outer Conductor Diameter 0.461 in [11.71 mm]
 Jacket Material Fluoropolymer
 Jacket Diameter 0.565 in [14.35 mm]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Mating Cycles	500	500
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material and Plating	Brass, Tri-Metal	Brass, Tri-Metal

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Environmental Specifications

Operating Range Temperature -40 to +125 deg C

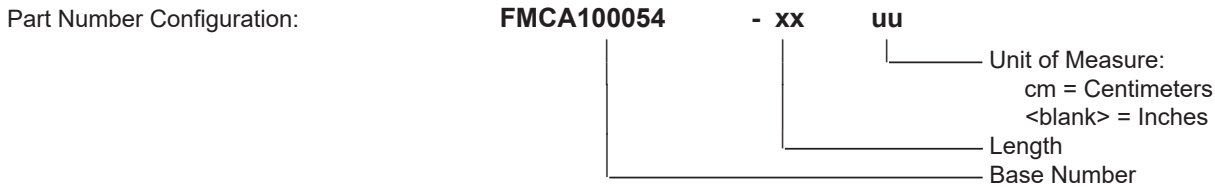
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order



Example: FMCA100054-12 = 12 inches long cable
FMCA100054-100cm = 100 cm long cable

Plenum Low Loss TNC Male to TNC Male Cable LMR-600-LLPX Coax with Times Microwave Components from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

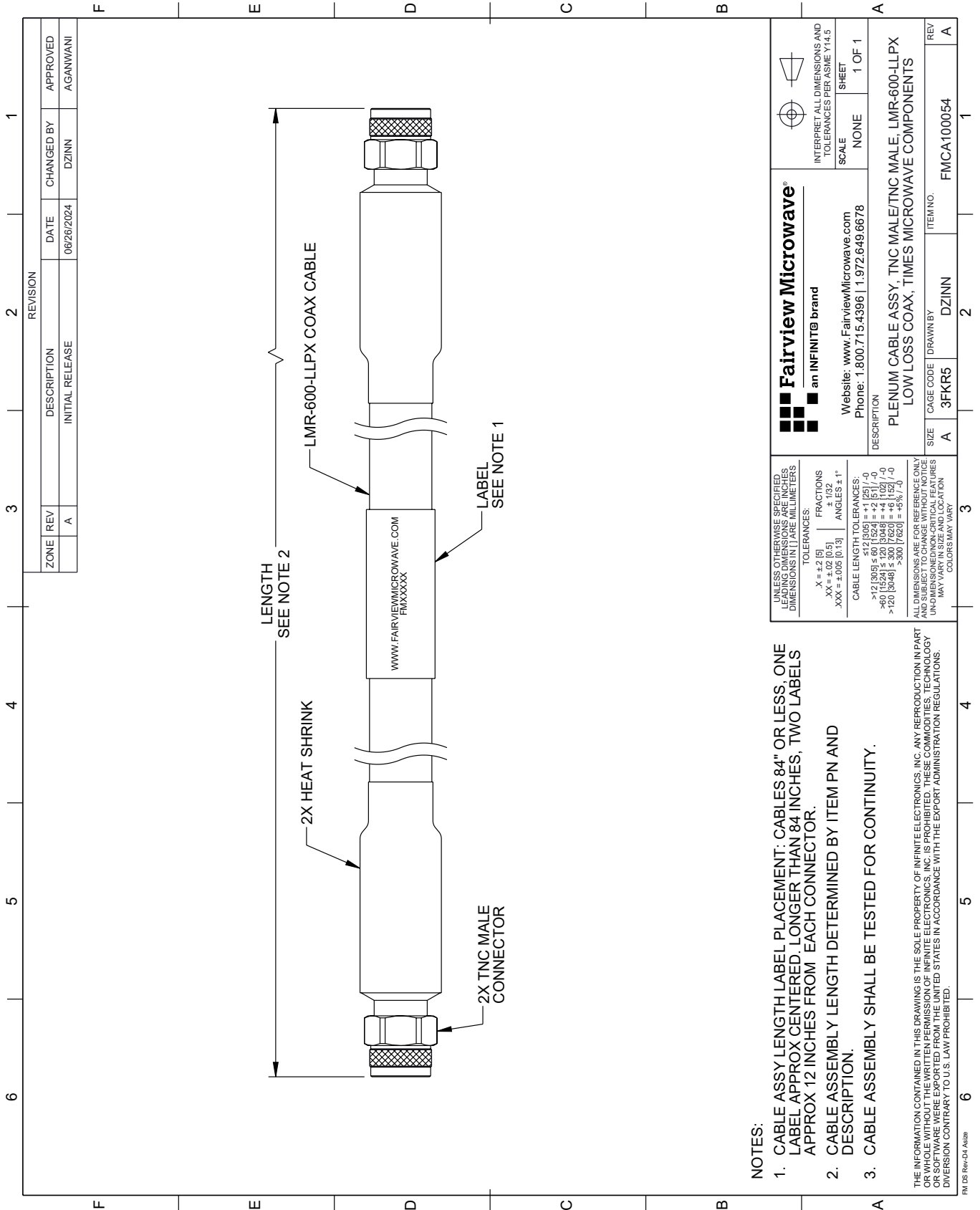
For additional information on this product, please click the following link: [Plenum Low Loss TNC Male to TNC Male Cable LMR-600-LLPX Coax with Times Microwave Components FMCA100054](#)

URL: <https://www.fairviewmicrowave.com/plenum-low-loss-tnc-male-to-tnc-male-cable-lmr-600-llpx-coax-with-times-microwave-components-fmca100054-p.aspx>

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FMCA100054 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	06/26/2024	DZINN	AGANWANI

Fairview Microwave®
an INFINIT® brand

Website: www.FairviewMicrowave.com
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UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]
 FRACTIONS ± 1/32
 ANGLES ± 1°

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.1 [25] / -0
 >120 [3048] ≤ 300 [7620] = ±.3 [7.6]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE NONE SHEET 1 OF 1

DESCRIPTION	SIZE	CAGE CODE	DRAWN BY	ITEM NO.
PLENUM CABLE ASSY, TNC MALE/TNC MALE; LMR-600-LLPX LOW LOSS COAX, TIMES MICROWAVE COMPONENTS	A	3FKR5	DZINN	FMCA100054

- NOTES:
- CABLE ASSY LENGTH LABEL PLACEMENT: CABLES 84" OR LESS, ONE LABEL APPROX CENTERED, LONGER THAN 84 INCHES, TWO LABELS APPROX 12 INCHES FROM EACH CONNECTOR.
 - CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
 - CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

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