

# FMCA1241-36 DATA SHEET

# Low Loss TNC Male to N Male Cable LL142 Coax in 36 Inch

The TNC male to type N male 36 inch cable using LL142 coax, part number FMCA1241-36, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to type N cable assembly has a male to male gender configuration with 50 ohm flexible LL142 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1241-36 TNC male to type N male cable assembly operates to 18 GHz. The triple shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 95 dB. Fairview High performance test cables boast 83% phase velocity and offer excellent low loss performance up to 18 GHz. The FMCA1241 cable assemblies use durable stainless steel connectors and an FEP jacket. The connector/cable interface has double heat-shrink booting which provides added strain relief while increasing the durability of the cable assembly. The low attenuation per foot in a 0.195 inch diameter cable creates a cable that has good flexibility while offering industry leading loss characteristics. All FMCA1241 cable assemblies are 100% RF tested to ensure the VSWR and insertion loss specifications meet or exceed Fairview's published electrical specifications.

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	Min	Тур	Max	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	95			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 (Max.)	0.72	0.84	1.02	1.29	1.62	dB
Insertion Loss (Typ.)	0.63	0.72	0.9	1.11	1.41	dB

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 36 in [914.4 mm]

#### Cable

Cable Type LL14:
Impedance 50 Ol
Inner Conductor Type Solid
Inner Conductor Material and Plating Copp
Dielectric Type PTFE

LL142 50 Ohms Solid

Solid Copper, Silver



# **Configuration:**

- TNC Male
- N Male
- LL142

#### **Features:**

- Max Frequency 18 GHz
- Shielding Effectivity > 95 dB
- 83% Phase Velocity
- Triple Shielded
- FEP Jacket
- 83% Velocity of Propagation (Vop)
- Shielding effectiveness >95 dB
- Maximum VSWR is < 1.40:1 to 18 GHz
- Minimum Bend Radius of 1 inch
- Operating Temperature range of -55 to +125°C
- 100% RF Tested
- Custom lengths available

# **Applications:**

- General Purpose
- Laboratory Use
- Long Run coaxial cable applications
- Antenna testing
- Low loss system cables

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Number of Shields

Shield Layer 1 Silver Plated Copper Tape
Shield Layer 2 Aluminum Polyester
Shield Layer 3 Silver Plated Copper Wire

Jacket Material FEP

Jacket Diameter 0.195 in [4.95 mm]

Repeated Minimum Bend Radius 1 in [25.4 mm]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	TNC Male	N Male		
Specification	MIL-STD-348			
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Beryllium Copper, G	old Beryllium Copper, Gold		
Contact Plating Spec.	ASTM-B488, 50μ In.	Min ASTM-B488, 50µ Inch.		
Dielectric Type	PTFE	PTFE		
Body Material & Plating	Passivated Stainless S	Steel Passivated Stainless Steel		
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2700		
Coupling Nut Material & Pla	ting Passivated Stainless S	Steel Passivated Stainless Steel		
Coupling Nut Plating Spec.	SAE-AMS-2700	SAE-AMS-2700		
Hex Size	9/16 Inch	3/4 Inch		
Torque		14 in-lbs 1.58 Nm		

## **Environmental Specifications**

**Temperature** 

Operating Range -55 to +125 deg C

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

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

Notes:

Values at 25°C, sea level.

#### **How to Order**

Part Number Configuration:

Example: FMCA1241-12 = 12 inches long cable

FMCA1241-100cm = 100 cm long cable





Low Loss TNC Male to N Male Cable LL142 Coax in 36 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 TNC Male to N Male Cable LL142 Coax in 36 Inch FMCA1241-36

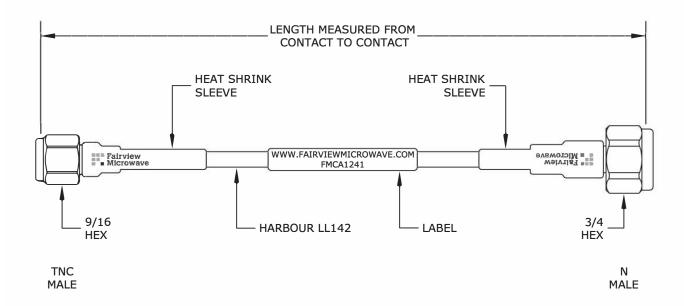
URL: https://www.fairviewmicrowave.com/low-loss-tnc-male-n-male-cable-II142-coax-fmca1241-36-p.aspx



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#### NOTE:

LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. LONGER THAN 48" WILL BE 6" AWAY FROM CONNECTOR.

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 TNC Male to N Male Cable LL142 Coax in 36 inch	DWG NO FMCA1241			CAGE CODE 3FKR5		
	CAD FILE 072116	SHEET	SCAL	E N/A	SIZE A	2233