

## TNC Male to TNC Male Cable LMR-200-FR Coax in 50 CM with Times Microwave components

The TNC male to TNC male 50 cm cable using LMR-200-FR coax, part number FMC00245-50CM, 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 flexible LMR-200-FR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00245-50CM TNC male to TNC male cable assembly operates to 5.8 GHz. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

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	Typ	Max	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		83		%
RF Shielding	90			dB
Group Delay		1.22 [4]		ns/ft [ns/m]
Capacitance		24.5 [80.38]		pF/ft [pF/m]
Inductance		0.061 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		5.36 [17.59]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
DC Resistance Outer Conductor		4.9 [16.08]		$\Omega/1000\text{ft}$ [ $\Omega/\text{Km}$ ]
Jacket Spark		3,000		Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.28	0.32	0.37	0.48	0.63	dB

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Length*	19.685 in [500 mm]
Diameter	0.69 in [17.53 mm]

#### Cable

Cable Type	LMR-200-FR
Impedance	50 Ohms



### Configuration:

- TNC Male
- TNC Male
- LMR-200-FR

### Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 83% Phase Velocity
- Double Shielded
- FRPE Jacket

### Applications:

- General Purpose
- Laboratory Use

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Inner Conductor Type	Stranded
Inner Conductor Material and Plating	Copper
Dielectric Type	PE
Number of Shields	2
Shield Layer 1	Aluminum Tape
Shield Layer 2	Tinned Copper Braid
Jacket Material	FRPE, Black
Jacket Diameter	0.195 in [4.95 mm]

One Time Minimum Bend Radius	0.5 in [12.7 mm]
Repeated Minimum Bend Radius	2 in [50.8 mm]
Bending Moment	2 lbs-ft [2.71 N-m]
Flat Plate Crush	15 lbs/in [0.27 Kg/mm]
Tensile Strength	40 lbs [18.14 Kg]

**Connectors**

Description	Connector 1	Connector 2
Type	TNC Male	TNC Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Dielectric Type	PTFE	PTFE
Outer Cond Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Hex Size	5/8 Inch	5/8 Inch

**Mechanical Specification Notes:**

\*All cable assemblies have a length tolerance of 1.5% or  $\pm 3/8$ ", whichever is greater.

**Environmental Specifications**
**Temperature**

Operating Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMC00245 - xx uu**


Example: FMC00245-12 = 12 inches long cable  
 FMC00245-100cm = 100 cm long cable

TNC Male to TNC Male Cable LMR-200-FR Coax in 50 CM with Times Microwave components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

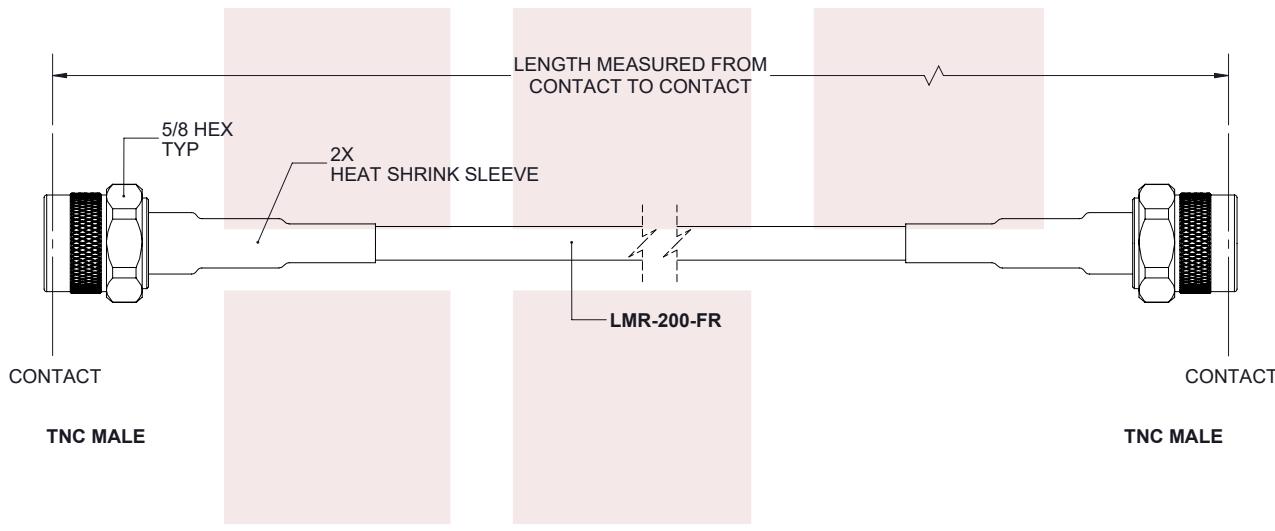
Click the following link to obtain additional part information: [TNC Male to TNC Male Cable LMR-200-FR Coax in 50 CM with Times Microwave components FMC00245-50CM](#)

URL: <https://www.fairviewmicrowave.com/tnc-male-tnc-male-cable-lmr200fr-coax-fmc00245-50cm-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/19/2020	S.ELLIS



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	TOLERANCES:	CABLE LENGTH (L) TOLERANCES:	
TITLE  TNC Male to TNC Male Cable LMR-200-FR Coax in 50 CM with Times Microwave components	.X = ± 2 [5.08] FRACTIONS .XX = ± .02 [.51] ± 1/32 .XXX = ± .005 [.13] ANGLES ± 1°	L ≤ 12 [305] = +1 [25] / -0 60 [1524] < L ≤ 60 [1524] = +2 [51] / -0 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0 300 [7620] < L = +5%L / -0	ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.
SIZE A	CAGE CODE 3FKR5	DRAWN BY K.DANG	ITEM NO. FMC00245 REV A

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