

## Low Loss RA TNC Male to RA TNC Male Cable LMR-200 Coax

The RA TNC male to RA TNC male cable using LMR-200 coax, part number FMCA3189, 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 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA3189 TNC male to TNC male cable assembly operates to 5.8 GHz. The right angle TNC interfaces on the LMR-200 cable allow for easier connections in tight spaces. 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.)	0.05	0.073	0.104	0.169	0.264	dB/ft
	0.16	0.24	0.34	0.55	0.87	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.2 dB per connector.

### Mechanical Specifications

#### Cable Assembly

Weight 0.16 lbs [72.57 g]

#### Cable

Cable Type LMR-200  
 Impedance 50 Ohms  
 Inner Conductor Type Solid



### Configuration:

- TNC Male Right Angle
- TNC Male Right Angle
- LMR-200

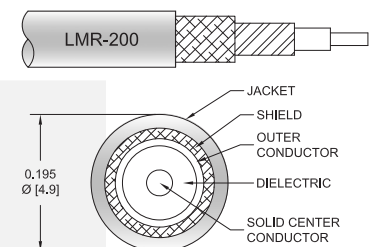
### Features:

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

### Applications:

- General Purpose
- Laboratory Use

### Cable Diagram:



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Inner Conductor Material and Plating Copper  
 Dielectric Type PE (F)  
 Number of Shields 2  
 Shield Layer 1 Aluminum Tape  
 Shield Layer 2 Tinned Copper Braid  
 Jacket Material PE, 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 0.2 lbs-ft [0.27 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
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Brass, Gold
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Material & Plating	Brass, Nickel	Brass, Nickel

**Environmental Specifications**

**Temperature**  
 Operating Range -40 to +85 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA3189 - xx uu**

cm = Centimeters  
 <blank> = Inches  
 Length

Example: FMCA3189-12 = 12 inches long cable  
 FMCA3189-100cm = 100 cm long cable

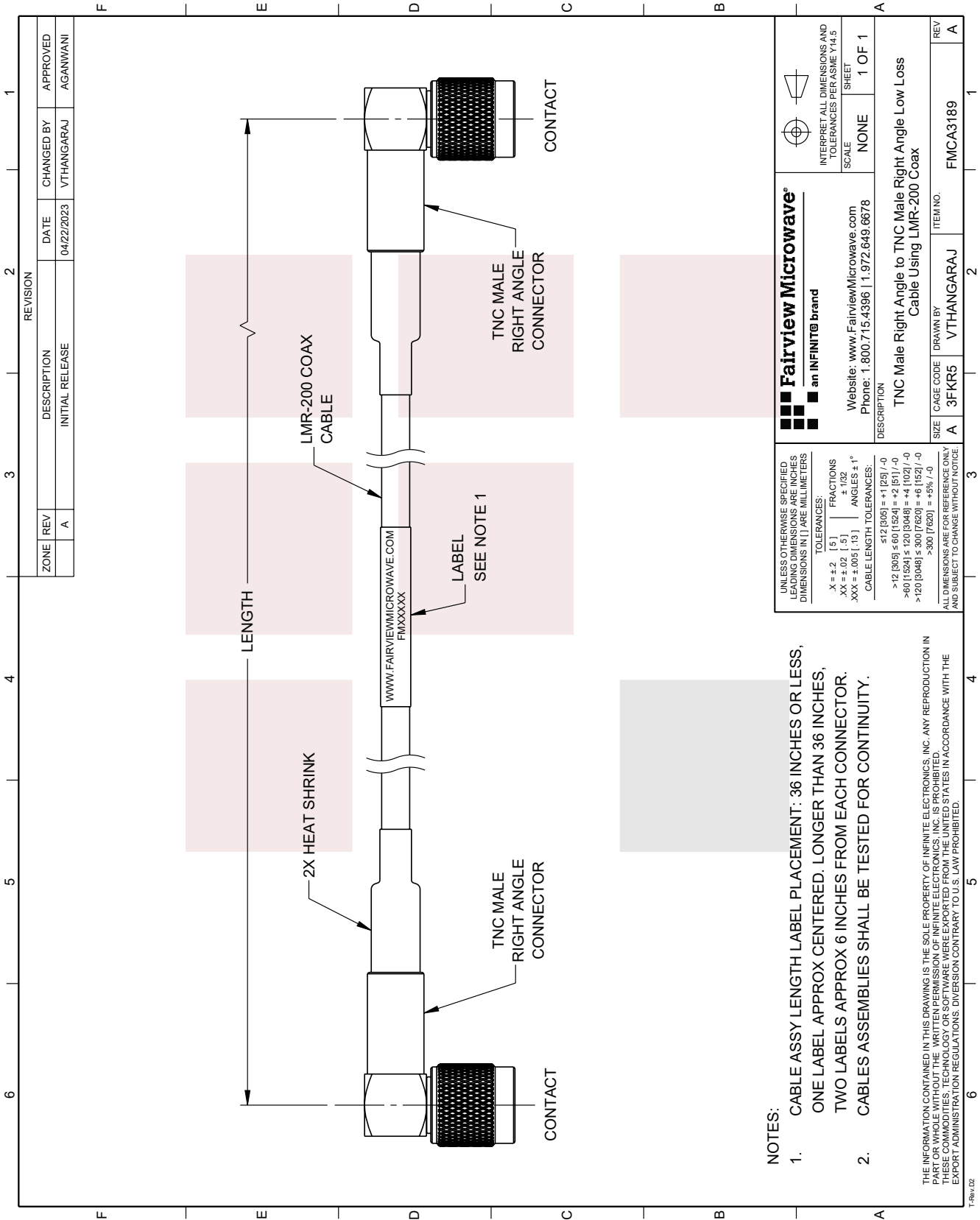
Low Loss RA TNC Male to RA TNC Male Cable LMR-200 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [Low Loss RA TNC Male to RA TNC Male Cable LMR-200 Coax FMCA3189](#)

URL: <https://www.fairviewmicrowave.com/low-loss-ra-tnc-male-to-ra-tnc-male-cable-lmr-200-coax-fmca3189-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.





- NOTES:**
1. CABLE ASSY LENGTH LABEL PLACEMENT: 36 INCHES OR LESS, ONE LABEL APPROX CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROX 6 INCHES FROM EACH CONNECTOR.
  2. CABLES ASSEMBLIES SHALL BE TESTED FOR CONTINUITY.

<p><b>Fairview Microwave<sup>®</sup></b> an INFINIT<sup>®</sup> brand</p> <p>Website: <a href="http://www.FairviewMicrowave.com">www.FairviewMicrowave.com</a> Phone: 1.800.715.4396   1.972.649.6678</p>		<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p> <p>SCALE: NONE SHEET: 1 OF 1</p>		
<p>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. DIMENSIONS IN LARGE MILLIMETERS.</p> <p>TOLERANCES:                  .X = ±.2 ( .5 ) FRACTIONS                  .XX = ±.02 ( .5 ) ± .032                  .XXX = ±.005 ( .13 ) ANGLES ± 1°</p> <p>CABLE LENGTH TOLERANCES:                  ≤12 (305) = +1 (25) / -0                  &gt;12 (305) ≤ 60 (1524) = +2 (51) / -0                  &gt;60 (1524) ≤ 120 (3048) = +4 (102) / -0                  &gt;120 (3048) ≤ 300 (7620) = +6 (152) / -0                  &gt;300 (7620) = +5% / -0</p>		<p>DESCRIPTION: TNC Male Right Angle to TNC Male Right Angle Low Loss Cable Using LMR-200 Coax</p>		
<p>ZONE</p>	<p>REV</p>	<p>DATE</p>	<p>CHANGED BY</p>	<p>APPROVED</p>
	A	04/22/2023	VTHANGARAJ	AGANWANI
<p>INITIAL RELEASE</p>				
<p>REVISION</p>				<p>REV</p>
1				A
2				A
3				A
4				A
5				A
6				A

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