

Low Loss TNC Male to BNC Male Cable LMR-240 Coax with Times Microwave Connectors and Weatherproof Booting

The TNC male to BNC male cable using LMR-240 coax, part number FMCA2163/SP, from Fairview Microwave is in-stock and ships same day. This Fairview TNC to BNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2163/SP TNC male to BNC male cable assembly operates to 4 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		4	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	90			dB
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ω /1000ft [Ω /Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ω /1000ft [Ω /Km]

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.1	0.25	0.5	1	4	GHz
Insertion Loss (Typ.)	0.023	0.039	0.055	0.079	0.161	dB/ft
	0.08	0.13	0.18	0.26	0.53	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as $0.1 \times \text{SQRT}(\text{FGHZ})$ dB per connector.

Mechanical Specifications

Cable Assembly

Cable

Cable Type	LMR-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Tinned Copper
Shield Layer 2	Aluminum Tape



Configuration:

- TNC Male
- BNC Male
- LMR-240

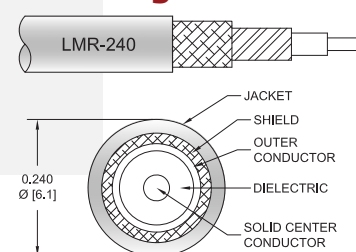
Features:

- Max Frequency 4 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket
- IP68 Weatherproof Booting
- UV Resistant Insulation
- Easy Slide On/Off

Applications:

- General Purpose
- Laboratory Use
- Outdoor Connections
- Water Resistant Installations

Cable Diagram:



Fairview Microwave
301 Leora Ln., Suite 100
Lewisville, TX 75056
Tel: 1-800-715-4396 / (972) 649-6678
Fax: (972) 649-6689
www.fairviewmicrowave.com
sales@fairviewmicrowave.com

Jacket Material PE, Black
 Jacket Diameter 0.24 in [6.1 mm]

Connectors

Description	Connector 1	Connector 2
Type	TNC Male	BNC Male
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	50µin minimum	100µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Body Plating Spec.	80µin minimum	100µin minimum
Coupling Nut Material & Plating	Brass, Tri-Metal	Brass, Tri-Metal
Coupling Nut Plating Spec.	80µin minimum	100µin minimum

Environmental Specifications

Temperature

Operating Range -40 to +85 deg C

Ingress Protection (IP) Rating

IP68

Shock

MIL-STD-202G, Method 213, Condition I

Vibration

MIL-STD-202G, Method 204, Condition B

Thermal Shock

MIL-STD-202G, Method 107, Condition B

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

Plotted and Other Data

Notes:

How to Order

Part Number Configuration:

FMCA2163/SP - xx uu

cm = Centimeters
 <blank> = Inches

Length

Example: FMCA2163/SP-12 = 12 inches long cable
 FMCA2163/SP-100cm = 100 cm long cable

Low Loss TNC Male to BNC Male Cable LMR-240 Coax with Times Microwave Connectors and Weatherproof Booting 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 BNC Male Cable LMR-240 Coax with Times Microwave Connectors and Weatherproof Booting FMCA2163/SP](https://www.fairviewmicrowave.com/low-loss-tnc-male-to-bnc-male-cable-lmr-240-coax-with-times-microwave-connectors-and-weatherproof-booting-fmca2163-sp)

URL: <https://www.fairviewmicrowave.com/low-loss-tnc-male-to-bnc-male-cable-lmr-240-coax-with-times-microwave-connectors-and-weatherproof-booting-fmca2163-sp-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.

