

# FMCA2097-48 DATA SHEET

# SMA Male to TNC Male Cable FM-SR141TB Coax in 48 Inch

The SMA male to TNC male 48 inch cable using FM-SR141TB coax, part number FMCA2097-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to male gender configuration with 50 ohm formable FM-SR141TB coax. Fairview Microwave's formable RF cable assemblies provide an alternative to costly pre-formed semi-rigid assemblies since they are hand formable.

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	Т	ур	Max	U	nits
Velocity of Propagation		6	9.5			%
RF Shielding	100					dB
Group Delay		1.43	[4.69]		ns/fl	[ns/m]
Capacitance		29 [	95.14]		pF/fl	[pF/m]

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Typ.)	0.68	0.85	1.27	1.87	2.8	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\* 48 in [121.92 cm]
Diameter 0.59 in [14.99 mm]

#### Cable

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Outer Conductor Material and Plating

One Time Minimum Bend Radius Repeated Minimum Bend Radius FM-SR141TB 50 Ohms Solid Copper, Silver PTFE

Tinned Copper Composite Braid

0.315 in [8 mm] 1.57 in [39.88 mm]



## **Configuration:**

- SMA Male
- TNC Male
- FM-SR141TB

## **Features:**

- Shielding Effectivity > 100 dB
- 69.5% Phase Velocity
- Dimensionally and electrically the same as standard, solid outer conductor semi-rigid coax
- Cable may be formed by hand and does not require special tools to bend
- May be formed more than once without damaging the outer conductor
- High RF Shielding >100 dB
- 100% Hi-pot and continuity tested
- 100% VSWR tested to max frequency of assembly
- Standard and custom lengths ship the same day

## **Applications:**

- General Purpose
- Laboratory Use

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#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	TNC Male
Specification	MIL-STD-348A	
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Brass, Gold	Gold
Contact Plating Spec.	50μ in. minimum	
Dielectric Type	Teflon	PTFE
Body Material & Plating	Stainless Steel, Go	ld Brass, Gold
Body Plating Spec.	10µ in. minimum	
Coupling Nut Material & Plating	Brass, Nickel	Brass, Nickel
Coupling Nut Plating Spec.	100µ in. minimum	١
Hex Size	5/16 in	
Torque	5 in-lbs 0.57 Nm	1

Mechanical Specification Notes:

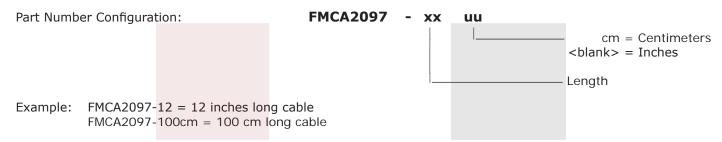
## **Compliance Certifications** (see product page for current document)

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

Notes:

Values at 25°C, sea level.

#### **How to Order**



SMA Male to TNC Male Cable FM-SR141TB Coax in 48 Inch 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: SMA Male to TNC Male Cable FM-SR141TB Coax in 48 Inch FMCA2097-48

URL: https://www.fairviewmicrowave.com/sma-male-tnc-male-cable-fm-sr141tb-coax-fmca2097-48-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.

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





