

## SMA Female Bulkhead to TNC Male Cable in 48 Inch Length Using RG223 Coax

The SMA female bulkhead to TNC male cable using RG223 coax, part number FMCA2749-48, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a female to male gender configuration with 50 ohm flexible RG223 coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2749-48 SMA female to TNC male cable assembly operates to 11 GHz. Our RF cable assembly with SMA bulkhead interface allows designers to create external connections on their product enclosures, and can be used in a variety of other rack mount and panel mount applications. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness.

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		11	GHz
VSWR			1.4:1	
Velocity of Propagation		66		%
Capacitance	30.8 [101.05]			pF/ft [pF/m]
Operating Voltage (AC)			500	Vrms

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	2.5	5	11	GHz
Insertion Loss (Typ.)	0.56	0.74	1.08	1.54	2.37	dB/ft
	1.84	2.43	3.54	5.05	7.78	dB/m

#### Electrical Specification Notes:

The Insertion Loss data above is based on the performance specifications of the coax 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]
Weight	0.139 lbs [63.05 g]

#### Cable

Cable Type	RG223
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PE



### Configuration:

- SMA Female Bulkhead
- TNC Male
- RG223

### Features:

- Max Frequency 11 GHz
- 66% Phase Velocity
- Double Shielded
- PVC Jacket

### Applications:

- General Purpose
- Laboratory Use

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Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Silver Plated Copper Braid
Jacket Material	PVC, Black
Jacket Diameter	0.209 in [5.31 mm]
Repeated Minimum Bend Radius	1 in [25.4 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	SMA Female	TNC Male
Mount Method	Bulkhead	
Specification	MIL-STD-348A	MIL-STD-348A
Impedance	50 Ohms	50 Ohms
Contact Material & Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Spec.	50 µin minimum	30 µin minimum
Dielectric Type	PTFE	PTFE
Body Material & Plating	Brass, Nickel	Brass, Nickel
Body Plating Spec.	100 µin minimum	100 µin minimum
Coupling Nut Material & Plating		Brass, Nickel
Coupling Nut Plating Spec.		100 µin minimum

**Environmental Specifications**

**Temperature**

Operating Range -40 to +80 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2749 - xx uu**

cm = Centimeters  
<blank> = Inches  
Length

Example: FMCA2749-12 = 12 inches long cable  
FMCA2749-100cm = 100 cm long cable

SMA Female Bulkhead to TNC Male Cable in 48 Inch Length Using RG223 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.

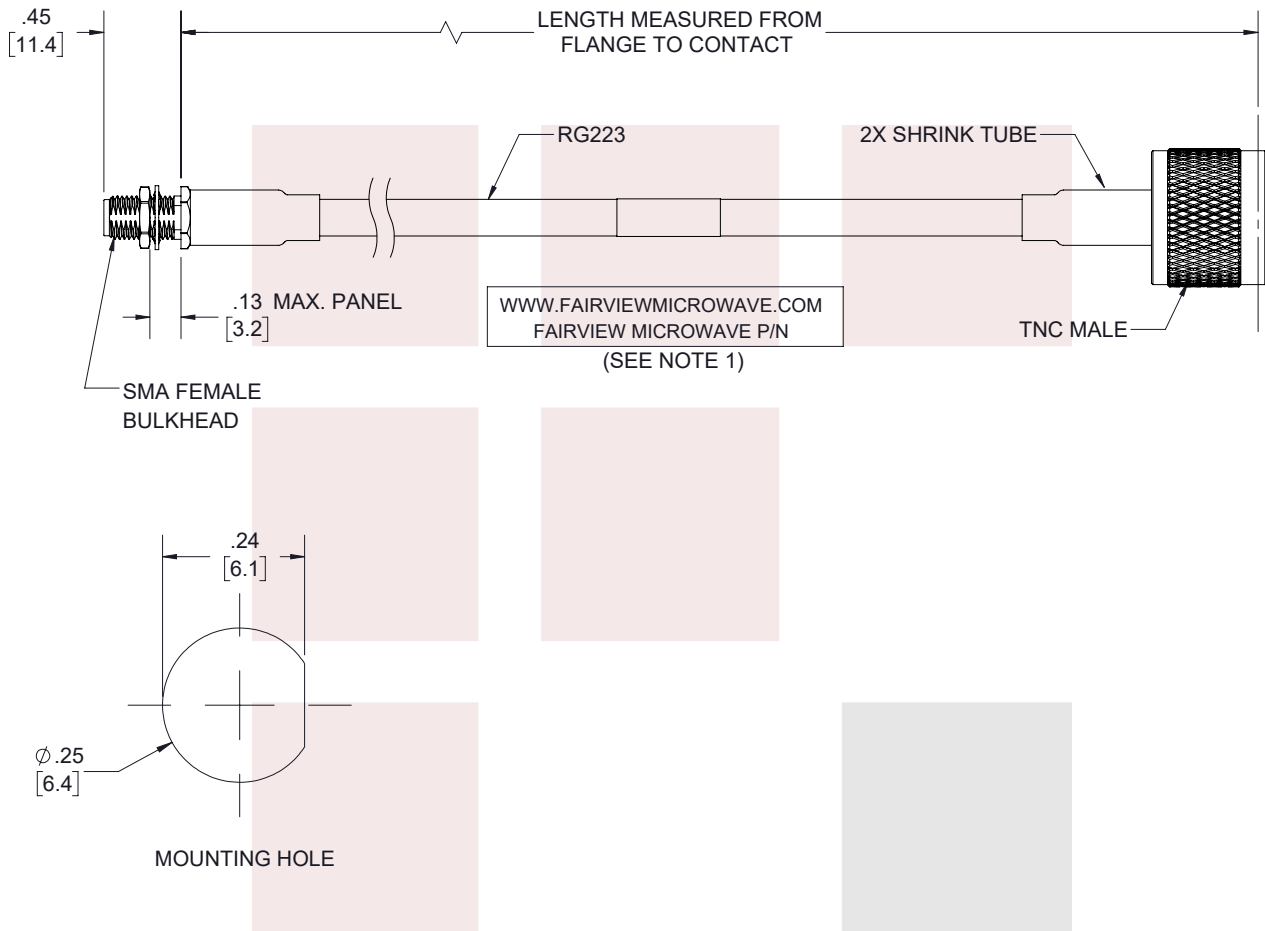
Click the following link to obtain additional part information: [SMA Female Bulkhead to TNC Male Cable in 48 Inch Length Using RG223 Coax FMCA2749-48](#)

URL: <https://www.fairviewmicrowave.com/sma-female-bulkhead-to-tnc-male-cable-rg223-coax-in-48-inch-fmca2749-48-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.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	2/21/2022	AGANWANI



- NOTES:
- CABLES 36" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 36" HAVE 2 LABELS, ONE AT EACH END 6.0" FROM THE FRONT OF THE CONNECTOR.

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TITLE

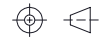
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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES  
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES: CABLE LENGTH (L) TOLERANCES:

.X = ±.2 [5.08]	FRACTIONS ± 1/32	L ≤ 12 [305] = +1 [25] / -0
.XX = ±.02 [.51]		12 [305] < L ≤ 60 [1524] = +2 [51] / -0
.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0
		120 [3048] < L ≤ 300 [7620] = +6 [152] / -0
		300 [7620] < L = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SCALE N/A

SIZE A	CAGE CODE 3FKR5	DRAWN BY MVEERAPPAN	ITEM NO. FMCA2749	REV A
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