

# Low Loss SMA Male to TNC Male Weatherproof Cable LMR-240 Coax with Times Microwave Components



# FMC01269/WP

## Configuration

Connector 1: SMA MaleConnector 2: TNC MaleCable Type: LMR-240Coax Flex Type: Flexible

#### **Features**

- · Max Frequency 6 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- · Double Shielded
- PE Jacket
- · Silicone Connector Boot
- IP68 Rated

# JACKET SHIELD OUTER CONDUCTOR DIELECTRIC SOLID CENTER CONDUCTOR

#### **Applications**

General Purpose

· Laboratory Use

# **Description**

The Fairview Microwave FMC01269/WP is a weatherproof low loss cable assembly that comes with SMA male connection with weatherproof boot on one end and TNC male with weatherproof boot on the other. Fairview Microwave's RF coaxial cable assembly products are designed for typical use, production, laboratory test and measurement, defense/military, aerial antenna towers, etc. The low loss cable has a 50 Ohm impedance and is specifically ready for quicker shipment than most in the industry can provide.

This weatherproof low loss RF cable assembly operates at a maximum frequency of 6 GHz. Our RF cable assembly has a PE jacket with 0.240 inches diameter. The SMA male to TNC male cable assembly FMC01269/WP is built with LMR-240 coax, which has a flexible design. This RF cable assembly with 0.5 inches diameter has copper as cable's inner conducting material and PE (F) dielectric type. The weatherproof boot low loss cable is reusable and can withstand elements including extreme temperature. Additional dimensions, specifications, and CAD drawings for this FMC01269/WP low loss RF cable are available on our downloadable PDF datasheet.

Fairview Microwave stocks a wide selection of weatherproof low loss cable assemblies that ship the same business day as ordered from our warehouse. Make your online purchase right now to take advantage of our same-day shipping. For further information on similar products, our expert technical support and knowledgeable sales team can help you get the ideal SMA male to TNC male cable assembly as per your requirements.

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	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]



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# **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		3.89 [12.76]		Ohms/1000ft [Ohms/Km]
Dielectric Withstanding Voltage (DC)			1,500	Vdc
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	250	500	1000	2500	6000	MHz	weight (ibs)
FMC01269/WP	Custom Lengths	Insertion Loss (Typ.)	0.039	0.076	0.079	0.129	0.204	dB/ft	
FIVICU1209/VVP	Available		0.13	0.25	0.26	0.43	0.67	dB/m	
FMC01269/WP-12	12 Inch	Insertion Loss (Typ.)	0.24	0.28	0.28	0.33	0.41	dB	0.605
FMC01269/WP-24	24 Inch	Insertion Loss (Typ.)	0.28	0.36	0.36	0.46	0.61	dB	0.638
FMC01269/WP-36	36 Inch	Insertion Loss (Typ.)	0.32	0.43	0.44	0.59	0.82	dB	0.671
FMC01269/WP-48	48 Inch	Insertion Loss (Typ.)	0.36	0.51	0.52	0.72	1.02	dB	0.704
FMC01269/WP-60	60 Inch	Insertion Loss (Typ.)	0.4	0.58	0.6	0.85	1.22	dB	0.737

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1: 0.1 dB

Loss due to Connector 2: 0.1 dB

Base Weight: 0.605 pounds

Additional Weight per Inch: 0.00275 pounds

### **Mechanical Specifications**

# Cable Assembly

 Width/Diameter
 0.5 in [12.7 mm]

 Weight
 0.605 lbs [274.42 g]

#### Cable

Cable TypeLMR-240Impedance50 OhmsInner Conductor TypeSolidInner Conductor Material and PlatingCopperDielectric TypePE (F)

Number of Shields2Shield Layer 1Aluminum TapeShield Layer 2Tinned Copper Braid

Jacket Material Jacket Diameter

 Jacket Diameter
 0.24 in [6.1 mm]

 One Time Minimum Bend Radius
 0.75 in [19.05 mm]

 Repeated Minimum Bend Radius
 2.5 in [63.5 mm]

 Bending Moment
 0.25 lbs-ft [0.34 N-m]

 Flat Plate Crush
 20 lbs/in [0.36 Kg/mm]

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# **FMC01269/WP**

Tensile Strength

80 lbs [36.29 Kg]

#### **Connectors**

Description	Connector 1	Connector 2
Туре	SMA Male	TNC Male
Option	Weatherproof Boot	Weatherproof Boot
Specification	MIL-STD-348	
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Brass, Gold
Contact Plating Specification	ASTM B488	50 μin minimum
Dielectric Type	PTFE	Teflon
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	
Body Material and Plating	Passivated Stainless Steel, Gold	Brass, Tri-Metal
Body Plating Specification	SAE-AMS-2700	80 μin minimum
Coupling Nut Material and Plating	Passivated Stainless Steel	Brass, Tri-Metal
Coupling Nut Plating Specification	SAE-AMS-2700	80 μin minimum
Boot Material	Silicone	Silicone

# **Environmental Specifications**

Ingress Protection (IP) Rating

IP68

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

Values at 25°C, sea level.



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# **FMC01269/WP**

# **Typical Performance Data**

#### **How to Order**

Part Number Configuration:

FMC01269/WP - xx uu

Unit of Measure:
cm = Centimeters
<br/>
<br/>
<br/>
<br/>
Length
Base Number

Example: FMC01269/WP-12 = 12 inches long cable

FMC01269/WP-100cm = 100 cm long cable

Low Loss SMA Male to TNC Male Weatherproof Cable LMR-240 Coax with Times Microwave Components from Fairview Microwave is instock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: Low Loss SMA Male to TNC Male Weatherproof Cable LMR-240 Coax with Times Microwave Components FMC01269/WP

URL: https://www.fairviewmicrowave.com/low-loss-sma-male-to-tnc-male-weatherproof-cable-lmr-240-coax-with-times-microwave-components-fmc01269-wp-p.aspx

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