

Test SMA Male to RA SMA Male Cable FM160FLEX Coax

FMC0204914



Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male Right Angle
- Cable Type: FM-160FLEX
- Coax Flex Type: Flexible

Features

- Max Frequency 18 GHz
- Shielding Effectivity > 90 dB
- 78% Phase Velocity
- Triple Shielded
- ETFE Jacket

Applications

- General Purpose
- Test & Measurement
- Laboratory Use

Description

The SMA male to RA SMA male cable using FM160FLEX coax, part number FMC0204914, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible FM-160FLEX coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC0204914 SMA male to SMA male cable assembly operates to 18 GHz. The right angle SMA interface on the FM-160FLEX cable allows for easier connections in tight spaces. The triple 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		18	GHz
VSWR			1.4:1	
Return Loss			-15.56	dB
Velocity of Propagation		78		%
RF Shielding	90			dB
Capacitance		26 [85.3]		pF/ft [pF/m]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Inductance		66 [216.54]		uH/ft [uH/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	3	6	12	18	GHz
Insertion Loss (Max.)	0.12	0.22	0.32	0.48	0.6	dB/ft
	0.39	0.72	1.05	1.57	1.97	dB/m
VSWR (Max.)	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	
Power Handling (Max.)	1,070	620	420	290	200	Watts

Mechanical Specifications

Cable Assembly

Width/Diameter	0.75 in [19.05 mm]
Weight	0.1 lbs [45.36 g]

Cable

Cable Type	FM-160FLEX
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PTFE
Number of Shields	3
Shield Layer 1	Silver Plated Copper
Shield Layer 2	Aluminum Tape
Shield Layer 3	Silver Plated Copper
Jacket Material	ETFE, Gray
Jacket Diameter	0.16 in [4.06 mm]
One Time Minimum Bend Radius	0.8 in [20.32 mm]
Repeated Minimum Bend Radius	0.24 in [6.1 mm]
Typical Flex Cycles	10,000

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Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male Right Angle
Specification	MIL-STD-348	MIL-PRF-39012
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Right Angle
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	50µ in. minimum	50µ in. minimum
Dielectric Type	PTFE	PTFE
Body Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Hex Size	5/16 Inch	5/16 Inch
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm

Environmental Specifications

Operating Range Temperature	-65 to +165 deg C
Storage Range Temperature	-65 to +200 deg C

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

Plotted and Other Data

Notes:

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Typical Performance Data

How to Order

Part Number Configuration: **FMC0204914** **- xx** **uu**

Unit of Measure:
cm = Centimeters
<blank> = Inches

Length

Base Number

Example: FMC0204914-12 = 12 inches long cable
FMC0204914-100cm = 100 cm long cable

Test SMA Male to RA SMA Male Cable FM160FLEX Coax from Fairview Microwave is in-stock 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: [Test SMA Male to RA SMA Male Cable FM160FLEX Coax FMC0204914](#)

URL: <https://www.fairviewmicrowave.com/sma-male-ra-sma-male-cable-fm160flex-coax-fmc0204914-p.aspx>

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FMC0204914 CAD Drawing
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