Test 2.92mm Male (Plug) to 2.92mm Female (Jack) Cable FM160FLEX Coax Up To 40 GHz, 1.4 VSWR in 36 Inch

FMC2949914-36

Configuration

- Connector 1: 2.92mm Male
- Connector 2: 2.92mm Female
- Cable Type: FM-160FLEX
- Coax Flex Type: Flexible

Features

- Max Frequency 40 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Triple Shielded
- ETFE Jacket

Applications

- General Purpose
- Test & Measurement
- Laboratory Use

Description

The 2.92mm male to 2.92mm female 36 inch cable using FM160FLEX coax, part number FMC2949914-36, from Fairview Microwave is in-stock and ships same day. This Fairview 2.92mm to 2.92mm cable assembly has a male to female 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 FMC2949914-36 2.92mm male to 2.92mm female cable assembly operates to 40 GHz. 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		40	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	90			dB
Capacitance		25 [82.02]		pF/ft [pF/m]
Inductance		66 [216.54]		uH/ft [uH/m]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Power Handling (Max.)	1,520	1,070	610	420	290	Watts

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
		Frequency	2500	5000	10000	20000	40000	MHz	
FMC2949914	Custom Lengths Available	Insertion Loss (Typ.)	0.2	0.293	0.429	0.643	0.973	dB/ft	
			0.66	0.97	1.41	2.11	3.2	dB/m	
FMC2949914-36	36 Inch	Insertion Loss (Typ.)	0.77	1.07	1.52	2.21	3.28	dB	0.113
FMC2949914-48	48 Inch	Insertion Loss (Typ.)	0.97	1.37	1.95	2.86	4.25	dB	0.14
FMC2949914-100CM	100 Meters	Insertion Loss (Typ.)	0.82	1.16	1.64	2.39	3.55	dB	0.115
FMC2949914-150CM	150 Meters	Insertion Loss (Typ.)	1.15	1.64	2.34	3.45	5.15	dB	0.118

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:	0.04*SQRT(FGHz)	dB
Loss due to Connector 2:	0.1	dB
Base Weight:	0.014	pounds
Additional Weight per Inch:	0.00234	pounds

Mechanical Specifications

Cable Assembly

Length	36 in [914.4 mm]
Width/Diameter	0.33 in [8.38 mm]
Weight	0.113 lbs [51.26 g]

Cable

Cable Type	FM-160FLEX
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper, Silver
Dielectric Type	PPO
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	2.92mm Male	2.92mm Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Color		SV
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM-B488 50µ In. Minimum	ASTM-B488 50µ In. Minimum
Dielectric Type	PPO	PPO
Outer Conductor Material and Plating		Passivated Stainless Steel
Outer Conductor Plating Specification		SAE-AMS-2700
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	
Coupling Nut Plating Specification	SAE-AMS-2700	
Hex Size	5/16 Inch	
Torque	8 in-lbs 0.9 Nm	

Mechanical Specification Notes:
IEEE-STD-P287. Figure G.4. Except Conductor Tolerances and Contact Retension.

Environmental Specifications

Operating Range Temperature -40 to +85 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: **FMC2949914 - xx uu**

- uu — Unit of Measure:
  - cm = Centimeters
  - <blank> = Inches
- xx — Length
- FMC2949914 — Base Number

Example: FMC2949914-12 = 12 inches long cable
FMC2949914-100cm = 100 cm long cable

Test 2.92mm Male (Plug) to 2.92mm Female (Jack) Cable FM160FLEX Coax Up To 40 GHz, 1.4 VSWR in 36 Inch 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 2.92mm Male (Plug) to 2.92mm Female (Jack) Cable FM160FLEX Coax Up To 40 GHz, 1.4 VSWR in 36 Inch FMC2949914-36

URL: https://www.fairviewmicrowave.com/test-2.92mm-male-to-2.92mm-female-cable-fm160flex-coax-in-36-inch-fmc2949914-36-p.aspx

FMC2949914-36 CAD Drawing

Test 2.92mm Male (Plug) to 2.92mm Female (Jack) Cable FM160FLEX Coax Up To 40 GHz, 1.4 VSWR in 36 Inch