

## FMCA1973-24 DATA SHEET

# SMA Male to 1.85mm Male Cable 24 Inch Length Using FM-103FLEX Coax

The SMA male to 1.85mm male 24 inch cable using FM-103FLEX coax, part number FMCA1973-24, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to 1.85mm cable assembly has a male to male gender configuration with 50 ohm flexible FM-103FLEX coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA1973-24 SMA male to 1.85mm male cable assembly operates to 26.5 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	Min	Т	ур	Max	ι	Jnits
Frequency Range	DC			26.5		GHz
VSWR				1.4:1		
Velocity of Propagation		-	76			%
RF Shielding	90					dB
Capacitance		26 [	85.3]		pF/f	t [pF/m]
Inductance		65 [2	13.25		uH/f	t [uH/m]
Input Power (Peak)				550	V	Vatts

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	26.5	GHz
Insertion Loss (Max.)	0.76	0.97	1.39	1.93	3.36	dB
Insertion Loss (Typ.)	0.71	0.9	1.29	1.77	3.07	dB

## **Mechanical Specifications**

#### **Cable Assembly**

Length\* 24 in [609.6 mm] Diameter 0.35 in [8.89 mm]

#### **Cable**

Cable Type
Impedance
Inner Conductor Type
Inner Conductor Material and Plating
Dielectric Type
Number of Shields
Shield Layer 1
Shield Layer 2

FM-103FLEX 50 Ohms Stranded Copper, Silver PTFE 3

Silver Plated Copper Conductive Tape



## **Configuration:**

- SMA Male
- 1.85mm Male
- FM-103FLEX

## Features:

- Max Frequency 26.5 GHz
- Shielding Effectivity > 90 dB
- 76% Phase Velocity
- Triple Shielded
- ETFE Jacket

## **Applications:**

- General Purpose
- · Laboratory Use

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com

sales@fairviewmicrowave.com





Shield Layer 3 Silver Plated Copper

Jacket Material ETFE, Gray

Jacket Diameter 0.103 in [2.62 mm]

One Time Minimum Bend Radius 0.32 in [8.13 mm]
Repeated Minimum Bend Radius 0.96 in [24.38 mm]

Typical Flex Cycles 500,000

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	SMA Male	1.85mm Male		
Impedance	50 Ohms	50 Ohms		
Contact Material & Plating	Beryllium Copper, Go	old Beryllium Copper, Gold		
Contact Plating Spec.	ASTM-B488 50μ In. N	ASTM-B488 50µ In. Min ASTM-B488 50µ In. Minimun		
Dielectric Type	PTFE	PPO		
Body Material & Plating	Passivated Stainless S	teel Passivated Stainless Stee		
Body Plating Spec.	SAE-AMS-2700	SAE-AMS-2700		
Coupling Nut Material & Pla	nting Passivated Stainless S	teel Passivated Stainless Stee		
Coupling Nut Plating Spec.	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		

Mechanical Specification Notes:

## **Environmental Specifications**

Temperature

Operating Range -45 to +125 deg C

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

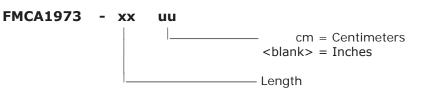
## **Plotted and Other Data**

Notes:

Values at 25°C, sea level.

#### **How to Order**

Part Number Configuration:



Example: FMCA1973-12 = 12 inches long cable

FMCA1973-100cm = 100 cm long cable

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689

Copyright © 2019

REV 1.0 Page 2 of 4

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





SMA Male to 1.85mm Male Cable 24 Inch Length Using FM-103FLEX Coax 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 1.85mm Male Cable 24 Inch Length Using FM-103FLEX Coax FMCA1973-24

URL: https://www.fairviewmicrowave.com/sma-male-1.85mm-male-FM-103FLEX-cable-assembly-FMCA1973-24-p.aspx







