

FMCA1977-36 DATA SHEET

2.92mm Male to 2.4mm Male Cable 36 Inch Length Using FM-103FLEX Coax

The 2.92mm male to 2.4mm male 36 inch cable using FM-103FLEX coax, part number FMCA1977-36, from Fairview Microwave is in-stock and ships same day. This Fairview 2.92mm to 2.4mm 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 FMCA1977-36 2.92mm male to 2.4mm male cable assembly operates to 45 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 | | | 45 | | 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 | ٧ | Vatts |

Performance by Frequency

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|-----------------------|------|------|------|------|------|-------|
| Frequency | 2.5 | 5 | 10 | 20 | 45 | GHz |
| Insertion Loss (Max.) | | 2.1 | 2.94 | 4.24 | 6.6 | dB |
| Insertion Loss (Typ.) | 1.39 | 1.92 | 2.7 | 3.87 | 6.02 | dB |

Mechanical Specifications

Cable Assembly

Length* 36 in [914.4 mm] Diameter 0.38 in [9.65 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:

- 2.92mm Male
- 2.4mm Male
- FM-103FLEX

Features:

- Max Frequency 45 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 | 2.92mm Male | 2.4mm Male | | |
| Impedance | 50 Ohms | 50 Ohms | | |
| Contact Material & Plating | Beryllium Copper, G | old Beryllium Copper, Gold | | |
| Contact Plating Spec. | ASTM-B488 50μ In. | Min ASTM-B488 50µ In. Minimu | | |
| Dielectric Type | PPO | PPO | | |
| Body Material & Plating | Passivated Stainless S | Steel Passivated Stainless Steel | | |
| Body Plating Spec. | SAE-AMS-2700 | SAE-AMS-2700 | | |
| Coupling Nut Material & Pla | nting Passivated Stainless S | Steel Passivated Stainless Steel | | |
| 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: FMCA1977-12 = 12 inches long cable

FMCA1977-100cm = 100 cm long cable

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^{*}All cable assemblies have a length tolerance of 1.5% or \pm 3/8", whichever is greater.





2.92mm Male to 2.4mm Male Cable 36 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: 2.92mm Male to 2.4mm Male Cable 36 Inch Length Using FM-103FLEX Coax FMCA1977-36

URL: https://www.fairviewmicrowave.com/2.92mm-male-2.4mm-male-FM-103FLEX-cable-assembly-FMCA1977-36-p.aspx







