

## Low Loss 1.85mm Male to 1.85mm Male Cable 070 Coax

The 1.85mm male to 1.85mm male cable using 070 coax, part number FMCA2091, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 1.85mm cable assembly has a male to male gender configuration with 50 ohm semi-rigid FM-SR070CUTNLL coax. Fairview Microwave's semi-rigid RF cable assemblies are ideal for high performance applications and can be formed, using proper tooling, to the routing pattern required. The FMCA2091 1.85mm male to 1.85mm male cable assembly operates to 70 GHz.

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	Typ	Max	Units
Frequency Range	DC		70	GHz
VSWR			1.4:1	
Velocity of Propagation		76.5		%

### Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	18	GHz
Insertion Loss (Max.)	0.14	0.2	0.45	0.64	0.87	dB/ft
	0.46	0.66	1.48	2.1	2.85	dB/m
Insertion Loss (Typ.)	0.14	0.2	0.45	0.64	0.87	dB/ft
	0.46	0.66	1.48	2.1	2.85	dB/m

#### Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as  $0.04 * \text{SQRT}(F\text{GHz})$  dB per connector.

### Mechanical Specifications

#### Cable Assembly

Diameter 0.35 in [8.89 mm]

#### Cable

Cable Type FM-SR070CUTNLL  
 Impedance 50 Ohms  
 Inner Conductor Type Solid  
 Inner Conductor Material and Plating Copper, Silver  
 Dielectric Type Microporous PTFE  
 Number of Shields 1  
 Outer Conductor Material and Plating Copper, Tin



### Configuration:

- 1.85mm Male
- 1.85mm Male
- FM-SR070CUTNLL

### Features:

- Max Frequency 70 GHz
- 76.5% Phase Velocity
- 500 Mating Cycles
- Maximum Cable Assembly Length of 5 Feet

### Applications:

- General Purpose
- Laboratory Use

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[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

One Time Minimum Bend Radius      0.25 in [6.35 mm]

**Connectors**

Description	Connector 1	Connector 2
Type	1.85mm Male	1.85mm Male
Impedance	50 Ohms	50 Ohms
Mating Cycles	500	500
Contact Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Spec.	ASTM-B488	ASTM-B488
Dielectric Type	PTFE	PTFE
Body Material & Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Body Plating Spec.	ASTM-B488	ASTM-B488
Coupling Nut Material & Plating	Steel	Steel
Torque	8 in-lbs 0.9 Nm	8 in-lbs 0.9 Nm

**Environmental Specifications**
**Temperature**

Operating Range      -65 to +150 deg C

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

**Plotted and Other Data**

Notes:

**How to Order**

Part Number Configuration:

**FMCA2091 - xx uu**

 cm = Centimeters  
 <blank> = Inches

Length

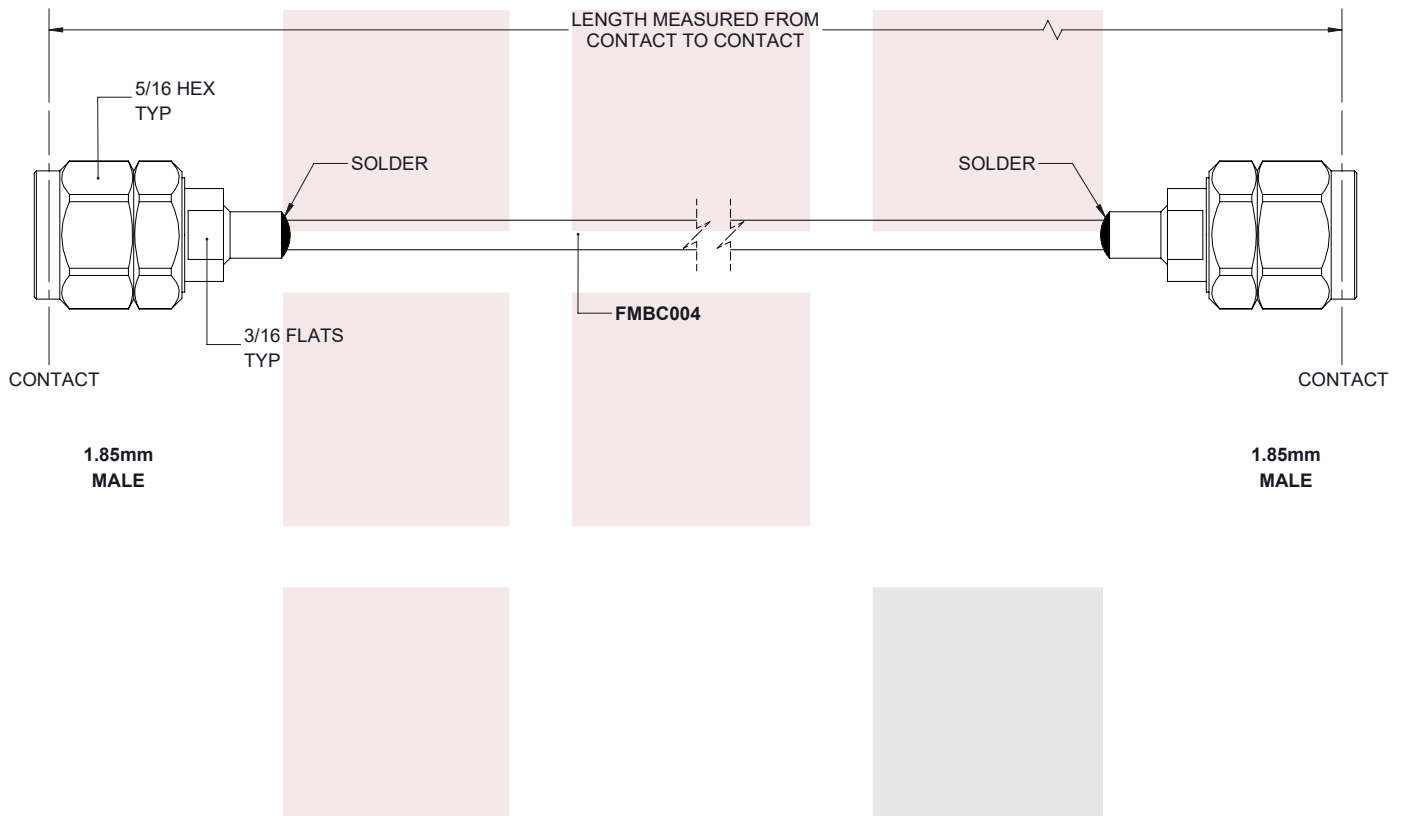
 Example: FMCA2091-12 = 12 inches long cable  
 FMCA2091-100cm = 100 cm long cable

Low Loss 1.85mm Male to 1.85mm Male Cable 070 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: [Low Loss 1.85mm Male to 1.85mm Male Cable 070 Coax FMCA2091](#)

URL: <https://www.fairviewmicrowave.com/low-loss-1.85mm-male-1.85mm-male-cable-070-coax-fmca2091-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.



STANDARD TOLERANCES	
.X	±0.2
.XX	±0.01
.XXX	±0.005

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

<p><b>Fairview Microwave</b> an INFINIT<sup>®</sup> brand</p>		NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].				
TITLE		DWG NO		CAGE CODE		
Low Loss 1.85mm Male to 1.85mm Male Cable 070 Coax		FMCA2091		3FKR5		
CAD FILE	09/11/19	SHEET	1 OF 1	SCALE	N/A	SIZE
						7361