

1.85mm Female to 1.85mm Female Cable
RG405 Type .086 Semi-Rigid Coax



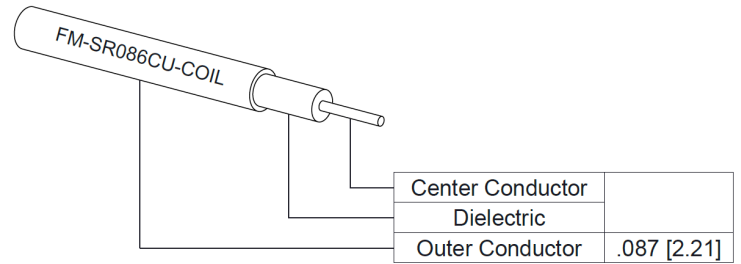
FMCA100194

Configuration

- Connector 1: 1.85mm Female
- Connector 2: 1.85mm Female
- Cable Type: FM-SR086CU-COIL
- Coax Flex Type: Semi-Rigid

Features

- Max Frequency 40 GHz



Applications

- General Purpose
- Laboratory Use

Description

The 1.85mm female to 1.85mm female cable using RG405 type .086 coax, part number FMCA100194, from Fairview Microwave is in-stock and ships same day. This Fairview 1.85mm to 1.85mm cable assembly has a female to female gender configuration with 50 ohm semi-rigid FM-SR086CU-COIL 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 FMCA100194 1.85mm female to 1.85mm female cable assembly operates to 40 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	Minimum	Typical	Maximum	Units
Frequency Range	DC		40	GHz
VSWR			1.4:1	
Dielectric Withstanding Voltage (AC)			1,000	Vrms

Specifications by Frequency

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Part Number	Length	Description	F1	F2	F3	F4	Units	Weight (lbs)
			Frequency	2500	5000	10000	20000	
FMCA100194	Custom Lengths Available	Insertion Loss (Typ.)	0.316	0.477	0.8	1.2	dB/ft	
			1.04	1.57	2.63	3.94	dB/m	
FMCA100194-6	6 Inch	Insertion Loss (Typ.)	0.36	0.44	0.6	0.8	dB	0.037
FMCA100194-12	12 Inch	Insertion Loss (Typ.)	0.52	0.68	1	1.4	dB	0.043
FMCA100194-18	18 Inch	Insertion Loss (Typ.)	0.68	0.92	1.4	2	dB	0.05
FMCA100194-24	24 Inch	Insertion Loss (Typ.)	0.84	1.16	1.8	2.6	dB	0.057
FMCA100194-36	36 Inch	Insertion Loss (Typ.)	1.15	1.64	2.6	3.8	dB	0.07

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: 0.1 dB
 Loss due to Connector 2: 0.1 dB
 Base Weight: 0.043 pounds
 Additional Weight per Inch: 0.00109 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter: 0.5 in [12.7 mm]
 Weight: 0.043 lbs [19.5 g]

Cable

Cable Type: FM-SR086CU-COIL
 Impedance: 50 Ohms
 Inner Conductor Type: Solid
 Inner Conductor Material and Plating: Copper Clad Steel, Silver
 Dielectric Type: PTFE
 Number of Shields: 1
 Outer Conductor 1 Material and Plating: Copper
 Jacket Material: Tan
 Repeated Minimum Bend Radius: 0.05 in [1.27 mm]

Connectors

Description	Connector 1	Connector 2
Type	1.85mm Female	1.85mm Female
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold over Nickel over Copper	Beryllium Copper, Gold over Nickel over Copper
Dielectric Type	PPO	PPO
Body Material and Plating	Stainless Steel, Passivated	Stainless Steel, Passivated

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Environmental Specifications

Operating Range Temperature -55 to +100 deg C

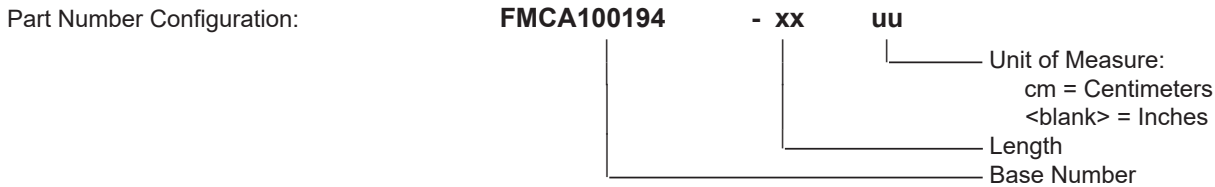
Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

Typical Performance Data

How to Order



Example: FMCA100194-12 = 12 inches long cable
FMCA100194-100cm = 100 cm long cable

1.85mm Female to 1.85mm Female Cable RG405 Type .086 Semi-Rigid 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.

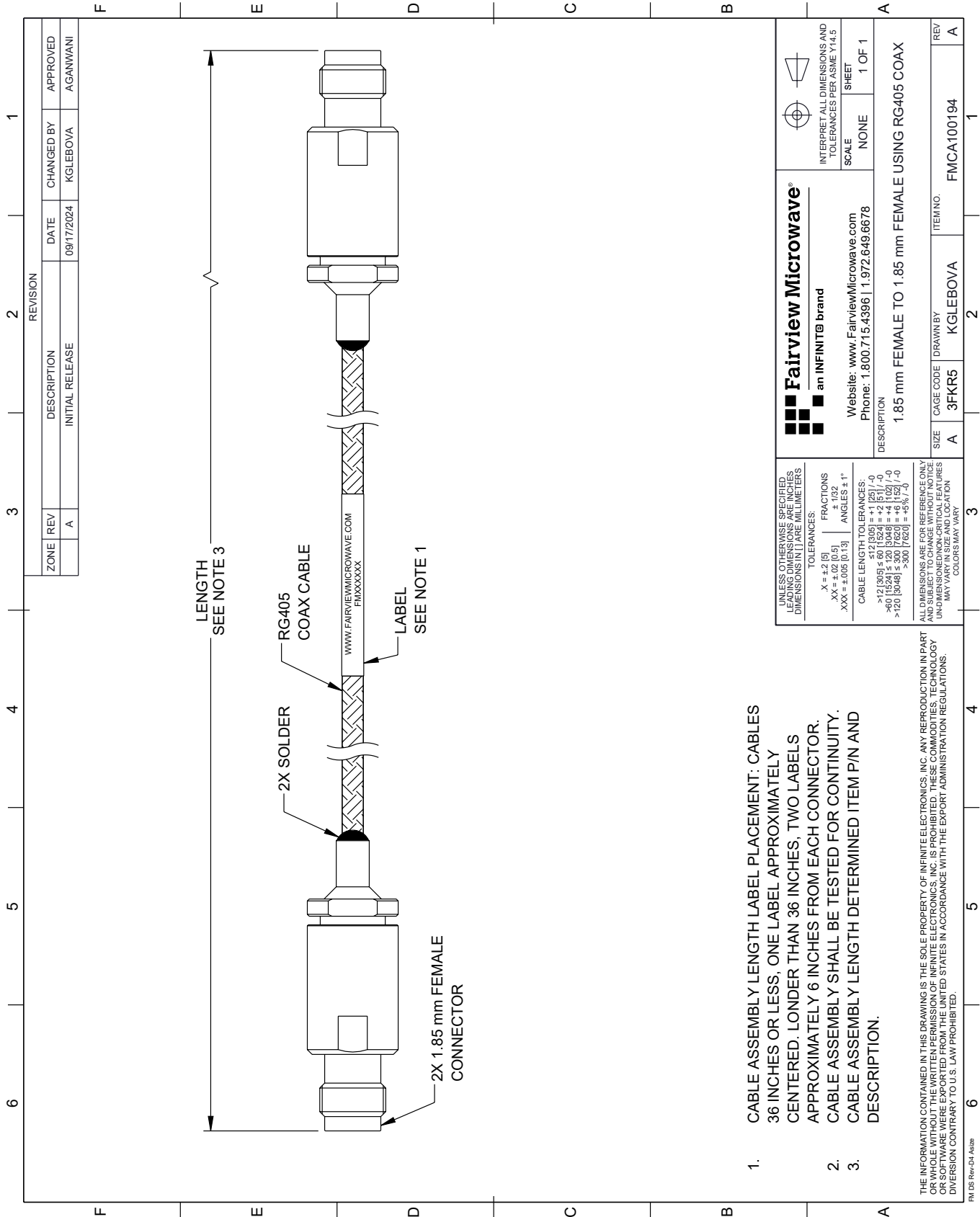
For additional information on this product, please click the following link: [1.85mm Female to 1.85mm Female Cable RG405 Type .086 Semi-Rigid Coax FMCA100194](#)

URL: <https://www.fairviewmicrowave.com/1.85mm-female-to-1.85mm-female-cable-rg405-type-.086-coax-fm-ca100194-p.aspx>

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FMCA100194 CAD Drawing

1.85mm Female to 1.85mm Female Cable RG405 Type .086 Semi-Rigid Coax



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION		
	A	INITIAL RELEASE	KGLEBOVA	AGANWANI

 Fairview Microwave® an INFINIT® brand		Website: www.FairviewMicrowave.com Phone: 1.800.715.4396 1.972.649.6678	INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5 SCALE: NONE SHEET: 1 OF 1
DESCRIPTION 1.85 mm FEMALE TO 1.85 mm FEMALE USING RG405 COAX			
SIZE	CAGE CODE	DRAWN BY	ITEM NO.
A	3FKR5	KGLEBOVA	FMCA100194
REV			A

- CABLE ASSEMBLY LENGTH LABEL PLACEMENT: CABLES 36 INCHES OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCHES, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.
- CABLE ASSEMBLY LENGTH DETERMINED ITEM P/N AND DESCRIPTION.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS ARE IN MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5] FRACTIONS ± 1/32
 .XX = ±.02 [0.5] ANGLES ± 1°
 .XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:
 >12 [305] ≤ 60 [1524] = ±.1 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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FM DS Rev-D4 Alt2