

0.047 Semi Rigid Non-Magnetic Cable with Silver Plated Copper Conductor



FM-SR047CU-NM

Configuration

- Non-Magnetic Semi-Rigid Cable

Features

Applications

- General Purpose Test
- Custom Cable Assemblies
- Medical
- Military and Aerospace
- Quantum Computing

Description

Fairview Microwave's 0.047 semi-rigid non-magnetic cable coaxial is available for same-day shipping from our facility. FM-SR047CU-NM-BULK cables from Fairview Microwave are great choices for solutions requiring high quality and rapid shipping. Our non-magnetic RF cable has a 50 Ohm impedance and is rated for a 109 GHz maximum operating frequency. This high-quality cable is part of a large selection of in-stock, commercial-off-the-shelf, and custom-built coaxial cable assemblies for RF and microwave that all ship the same business day as they are ordered.

These semi-rigid RF cable assemblies are built with RF shielding of 165 dB and have a cable weight of 0.014 lbs/ft. Our RF coaxial cable has a 0.0113-inch SPC (silver-plated copper) conductor. The coaxial RF cable has a maximum attenuation of 390 dB/100ft and a maximum power of 5 Watts at a frequency of 90 GHz.

The technical performance specifications of this 109 GHz cable are located on the FM-SR047CU-NM-BULK datasheet PDF, along with a CAD drawing and dimensions. Our non-magnetic RF cable has a PTFE dielectric type. This RF non-magnetic cable has a copper outer conductor and a maximum operating temperature of 100 deg C. The Fairview Microwave 0.047 semi-rigid RF cable assembly data sheet with specs and drawing dimensions can be found on this product page just above.

0.047 semi-rigid non-magnetic cable is one of a large selection of in-stock RF products available. Fairview Microwave not only has this off-the-shelf but also custom versions of our cable assemblies are available for same-day shipping, we have thousands of other products that have same day shipping. Our expert technical support and knowledgeable sales teams are ready to help and answer your RF coaxial cable assembly questions.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		109	GHz
Impedance		50		Ohms
Velocity of Propagation		69.5		%
Shielding Effectiveness	165			dB
Operating Voltage (AC)			1,000	Vrms
Dielectric Withstanding Voltage (AC)			2,000	Vrms

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Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.5	1	5	10	18	GHz
Attenuation, Max	24	34	79	114	156	dB/100ft
	78.74	111.55	259.19	374.02	511.81	dB/100m
Input Power (CW), Max	80	55	25	17	12	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	26.5	40	50	65	90	GHz
Attenuation, Max	195	245	278	323	390	dB/100ft
	639.76	803.81	912.07	1,059.71	1,279.53	dB/100m
Input Power (CW), Max	10	8	7	6	5	Watts

Mechanical Specifications

Weight	0.014 lbs/ft [0.02 kg/m]
Min. Bend Radius (Installation)	0.05 in [1.27 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strand	0.011 in [0.28 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.037 in [0.94 mm]
Outer Conductor	Copper	0.047 in [1.19 mm]

Environmental Specifications

Temperature	
Operating Range	-55 to +100 deg C

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

Plotted and Other Data

Notes:

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0.047 Semi Rigid Non-Magnetic Cable with Silver Plated Copper Conductor 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: [0.047 Semi Rigid Non-Magnetic Cable with Silver Plated Copper Conductor FM-SR047CU-NM](https://www.fairviewmicrowave.com/sr-semirigid-coax-cable-fm-sr047cu-nm-p.aspx)

URL: <https://www.fairviewmicrowave.com/sr-semirigid-coax-cable-fm-sr047cu-nm-p.aspx>

The information contained within 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 liability arising out of the use of any part or document.

FM-SR047CU-NM CAD Drawing

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