

LL160 Low Loss Flexible Coax Cable Green FEP Jacket

LL160 low loss coaxial cable with flat strip foil braid is part of our full line of RF components available for same-day shipping from Fairview Microwave. The LL160 coaxial cable features a low loss dielectric with an 82.5% velocity of propagation (VoP). These low loss coax features combine to make Fairview Microwave's cable well suited for applications that require a high-performance RF cable. Applications for coax with low loss include long cable lengths where the attenuation from standard solid dielectric coax would impact system performance.

The 0.160 inch diameter coax has a durable FEP outer jacket that makes this cable appropriate for a wide range of indoor or outdoor applications. The flat foil braid provides superior shielding and the expanded PTFE dielectric contributes to the lower attenuation and improves the power handling of this coax cable.

Our datasheet specifications and drawing with dimensions for the LL160 coax cable are shown below in this PDF. In addition to bulk RF cable, Fairview Microwave offers cable assemblies using LL160 with a wide selection of connector options available. See our web site to find the right connector cable combination for your application.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		18	GHz
Impedance		50		Ohms
Structural VSWR		1.35:1		
Velocity of Propagation		82.5		%
Nominal Capacitance		25		pF/ft
		[82.02]		[pF/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.4	1	2	2.4	3	GHz
Attenuation, Max	6.9 22.64	11 36.09	15.8 51.84	17.3 56.76	19.4 63.65	dB/100ft dB/100m
Attenuation, Typ	6.3 20.67	10 32.81	14.3 46.92	15.7 51.51	17.7 58.07	dB/100ft dB/100m
Power In (CW), Max	900	560			310	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	5	10	18			GHz
Attenuation, Max	25.4 83.33	36.7 120.41	50.6 166.01			dB/100ft
Attenuation, Typ	23.1 75.79	33.4 109.58	46 150.92			dB/100ft



Configuration:

- Low Loss Flexible Cable
- 3 Shield(s)

Features:

- Low Loss dielectric 82.5% VoP
- Phase stable Expanded PTFE dielectric
- Double Shielded with metalized polyimide interlayer
- Shielding >95dB
- FEP Jacket

Applications:

- Low Loss system cables
- Rugged environments
- Test systems with long cable runs
- ATE, Automated Test Equipment
- Antenna Jumpers

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Power In (CW), Max	240	160	115	Watts
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Electrical Specification Notes:
 Power handling derates linearly to 0% from +25°C to +250°C.

Mechanical Specifications

Diameter	0.16 in [4.06 mm]
Weight	0.027 lbs/ft [0.04 kg/m]
Min. Bend Radius (Repeated)	0.8 in [20.32 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strands	0.04 in [1.02 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.11 in [2.79 mm]
First Shield	Silver Plated Copper 90% min. coverage	0.116 in [2.95 mm]
Second Shield	Aluminum Polyester	0.122 in [3.1 mm]
Third Shield	Silver Plated Copper 90% min. coverage	0.14 in [3.56 mm]
Jacket	FEP, Green	0.16 in [4.06 mm]

Environmental Specifications

Temperature	
Operating Range	-55 to +200 deg C

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

Plotted and Other Data

Notes:

LL160 Low Loss Flexible Coax Cable Green FEP Jacket from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [LL160 Low Loss Flexible Coax Cable Green FEP Jacket LL160-FT](#)

URL: <https://www.fairviewmicrowave.com/ll160-low-loss-flexible-coax-cable-fep-jacket-ll160-ft-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.

REVISIONS					
REV.	DESCRIPTION	DATE	APPROVED		
A	INITIAL RELEASE	03/24/2022	AGANWANI		

Diagram labels: JACKET, THIRD SHIELD, SECOND SHIELD, FIRST SHIELD, DIELECTRIC, SOLID CENTER CONDUCTOR.

Dimension: $\varnothing .160$ [4.06]

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<div><div><div></div><div></div><div></div><div></div></div><div><div>Fairview Microwave</div><div>an INFINITE brand</div></div></div>		<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS</p> <p>TOLERANCES: CABLE LENGTH (L) TOLERANCES:</p> <table><tbody><tr><td>.X = ±.2 [5.08]</td><td>FRACTIONS</td><td>L ≤ 12 [305] = +1 [25] / -0</td></tr><tr><td>.XX = ±.02 [.51]</td><td>± 1/32</td><td>12 [305] < L ≤ 60 [1524] = +2 [51] / -0</td></tr><tr><td>.XXX = ±.005 [.13]</td><td>ANGLES ± 1°</td><td>60 [1524] < L ≤ 120 [3048] = +4 [102] / -0</td></tr><tr><td></td><td></td><td>120 [3048] < L ≤ 300 [7620] = +6 [152] / -0</td></tr><tr><td></td><td></td><td>300 [7620] < L = +5%L / -0</td></tr></tbody></table>		.X = ±.2 [5.08]	FRACTIONS	L ≤ 12 [305] = +1 [25] / -0	.XX = ±.02 [.51]	± 1/32	12 [305] < L ≤ 60 [1524] = +2 [51] / -0	.XXX = ±.005 [.13]	ANGLES ± 1°	60 [1524] < L ≤ 120 [3048] = +4 [102] / -0			120 [3048] < L ≤ 300 [7620] = +6 [152] / -0			300 [7620] < L = +5%L / -0	<p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF FAIRVIEW MICROWAVE CORPORATION. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE N/A</p>	
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