

## LL142 Low Loss Flexible Coax Cable Green FEP Jacket

LL142 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 LL142 coaxial cable features a low loss dielectric with an 80% 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 0.195 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 LL142 coax cable are shown below in this PDF. In addition to bulk RF cable, Fairview Microwave offers cable assemblies using LL142 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		80		%
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	5.2 17.06	8.2 26.9	11.8 38.71	12.9 42.32	14.5 47.57	dB/100ft dB/100m
Attenuation, Typ	4.7 15.42	7.5 24.61	10.7 35.1	11.7 38.39	13.2 43.31	dB/100ft dB/100m
Power In (CW), Max	1,310	820			460	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	5	10	18			GHz
Attenuation, Max	18.9 62.01	27.4 89.9	37.6 123.36			dB/100ft
Attenuation, Typ	17.2 56.43	24.9 81.69	34.2 112.2			dB/100ft



### Configuration:

- Low Loss Flexible Cable
- 3 Shield(s)

### Features:

- Low Loss dielectric 80% 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	350	240	170	Watts
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Electrical Specification Notes:  
 Power handling derates linearly to 0% from +25°C to +250°C.

### Mechanical Specifications

Diameter	0.195 in [4.95 mm]
Weight	0.039 lbs/ft [0.06 kg/m]
Min. Bend Radius (Repeated)	0.975 in [24.77 mm]

### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, Silver, 1 Strands	0.051 in [1.3 mm]
Conductor Type	Solid	
Dielectric	PTFE	0.145 in [3.68 mm]
First Shield	Silver Plated Copper Tape 90% min. coverage	0.152 in [3.86 mm]
Second Shield	Aluminum Polyester	0.158 in [4.01 mm]
Third Shield	Silver Plated Copper Wire 90% min. coverage	0.178 in [4.52 mm]
Jacket	FEP, Green	0.195 in [4.95 mm]

### Environmental Specifications

Temperature	
Operating Range	-55 to +200 deg C

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

### Plotted and Other Data

Notes:

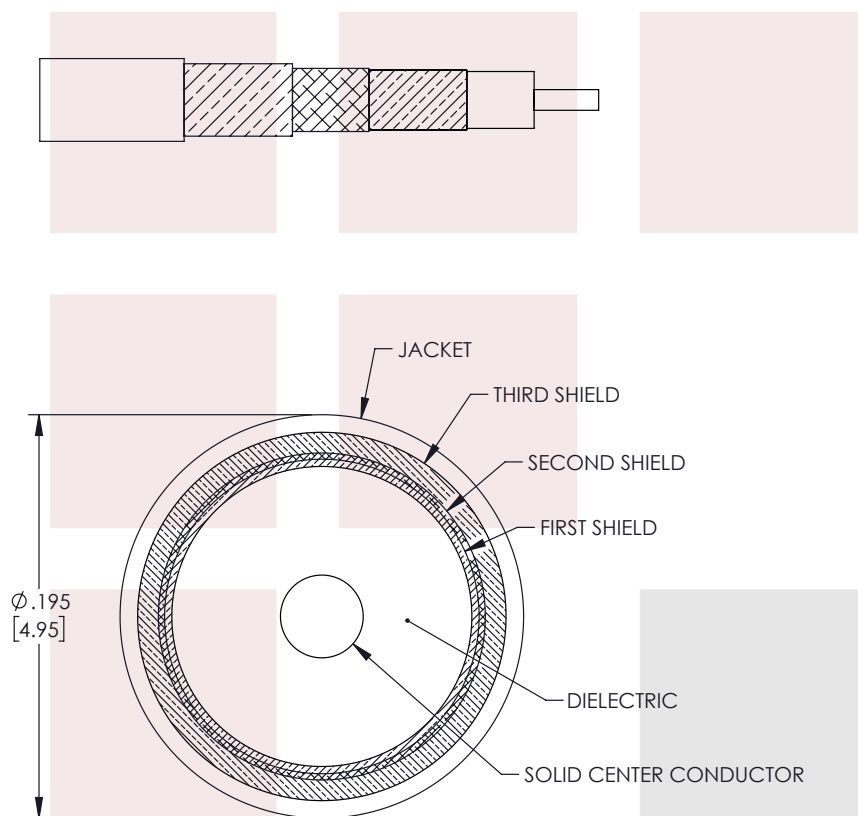
LL142 Low Loss Flexible Coax Cable Green FEP Jacket from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [LL142 Low Loss Flexible Coax Cable Green FEP Jacket LL142-FT](#)

URL: <https://www.fairviewmicrowave.com/ll142-low-loss-flexible-coax-cable-fep-jacket-ll142-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


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an INFINITE brand

TITLE

LL142 Low Loss Flexible Coax Cable Green FEP Jacket

TOLERANCES:

.X = ±.2	[.508]	FRACTIONS
.XX = ±.02	[.51]	± 1/32
.XXX = ±.005	[.13]	ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:

$$\begin{aligned} L &\leq 12 [305] = +1 [25] / -0 \\ 12 [305] &< L \leq 60 [1524] = +2 [51] / -0 \\ 60 [1524] &< L \leq 120 [3048] = +4 [102] / -0 \\ 120 [3048] &< L \leq 300 [7620] = +6 [152] / -0 \\ 300 [7620] &< L = +5\%L / -0 \end{aligned}$$

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE	N/A
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ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY DZINN	ITEM NO. LL142-FT	REV A
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