



Coaxial Cable

PRODUCT SPECIFICATION

LDF7-50A

Standard coaxial cable, 1-5/8", 50 ohm foam HELIAX (Wideband from 0.5-2500 MHz)

CHARACTERISTICS

Mechanical Specifications

Pressurizable:	Yes
Weight (lb/ft):	0.90
Weight (kg/m):	1.34
Tensile Strength (lb):	900.00
Tensile Strength (kg):	408.00
Flat Plate Crush Strength (lb/in):	150.00
Flat Plate Crush Strength (kg/mm):	2.70
Minimum Bending Radius (inches):	20.00
Minimum Bend Radius (millimeters):	510.00
Bending Moment (lb-ft):	45.00
Bending Moment (N-m):	61.00
Number of Bends (minimum):	15.00
Number of Bends (typical):	50.00

Electrical Specifications

Cable Impedance (ohms):	50.00
Maximum Frequency (GHz):	2.50
Velocity percentage:	88.00
Peak Power Rating (kW):	315.00
DC Resistance Inner (ohms/1000ft):	0.25
DC Resistance Inner (ohms/1000m):	0.82
DC Resistance Outer (ohms/1000ft):	0.13
DC Resistance Outer (ohms/1000m):	0.43
Cable Test Voltage (VDC):	11000.00
Jacket Spark volts (RMS):	10000.00
Capacitance (pF/ft):	23.10
Capacitance (pF/m):	75.80
Inductance (microH/ft):	0.06
Inductance (microH/m):	0.20
Insulation Resistance (Meg-Ohms):	100000.00

Construction Materials

Dielectric Type:	Low Density Foam Dielectric
Dielectric Material:	Ployethylene Foam
Jacket Color:	Black
Jacket Description:	Polyethelyne

Customer Support Center:

From North America: 1-800-255-1479
International: +1-708-873-2307

www.andrew.com

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Jacket Material:	Polyethylene
Outer Conductor Material:	Corrugated Copper
Inner Conductor Material:	Corrugated Copper Tube

Dimensions

Diameter Over Jacket (inches):	1.98
Diameter Over Jacket (millimeters):	50.30
Outer Conductor Outside Diameter (inches):	1.82
Outer Conductor Outside Diameter (millimeters):	46.20
Outer Conductor Inside Diameter (inches):	1.80
Outer Conductor Inside Diameter (millimeters):	45.70
Inner Conductor Outside Diameter (inches):	0.68
Inner Conductor Outside Diameter (millimeters):	17.30
Inner Conductor Inside Diameter (inches):	0.64
Inner Conductor Inside Diameter (millimeters):	16.30

General Specifications

Cable Grade:	Standard
NEC Classification Type:	N/A
Nominal Size (inches):	1-5/8
Short Description:	1-5/8" 50 ohm HELIX foam coaxial cable

Available Connectors

Part Number	Connector Type	Special Characteristics	Inner Contact	Grade
201942	F Flange Female	N/A	Tab-Flare	Standard
L47F	F Flange Male	N/A	Tab-Flare	Standard
L47R	1-5/8 EIA Flange	N/A	Tab-Flare	Standard
L47S	7/8 EIA Flange	N/A	Tab-Flare	Standard
L7PDF-RC	7-16 DIN Female	Ring Flare	Captivated	Plated
L7PDF-RPC	7-16 DIN Female	One Piece	Captivated	Plated
L7PDM-RPC	7-16 DIN Male	One Piece	Captivated	Plated
L7PNF-RC	N Female	Ring Flare	Captivated	Plated
L7PNF-RPC	N Female	One Piece	Captivated	Plated
L7PNM-RPC	N Male	One Piece	Captivated	Plated

Attenuation and Average Power Ratings

Frequency (MHz)	Attenuation (dB/100ft)	Attenuation (dB/100m)	Average Power (kW)
0.5	0.014	0.044	247.32
1	0.019	0.063	174.51

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Attenuation and Average Power Ratings

Frequency (MHz)	Attenuation (dB/100ft)	Attenuation (dB/100m)	Average Power (kW)
1.5	0.024	0.077	142.26
2	0.027	0.089	123.03
10	0.062	0.202	54.34
20	0.088	0.289	38.07
30	0.109	0.356	30.86
50	0.142	0.465	23.64
88	0.191	0.627	17.54
100	0.205	0.671	16.38
108	0.213	0.699	15.72
150	0.254	0.834	13.18
174	0.276	0.904	12.16
200	0.297	0.976	11.27
300	0.372	1.220	9.01
400	0.437	1.433	7.67
450	0.467	1.532	7.18
500	0.496	1.626	6.76
512	0.503	1.649	6.67
600	0.550	1.806	6.09
700	0.602	1.974	5.57
800	0.650	2.134	5.15
824	0.662	2.171	5.06
860	0.679	2.226	4.94
894	0.694	2.278	4.83
960	0.724	2.376	4.63
1000	0.742	2.434	4.52
1250	0.848	2.781	3.95
1500	0.947	3.106	3.54
1640	1.000	3.281	3.35
1700	1.022	3.354	3.28
1800	1.059	3.474	3.16
2000	1.131	3.709	2.96
2100	1.165	3.824	2.88
2200	1.200	3.937	2.79
2300	1.234	4.048	2.72

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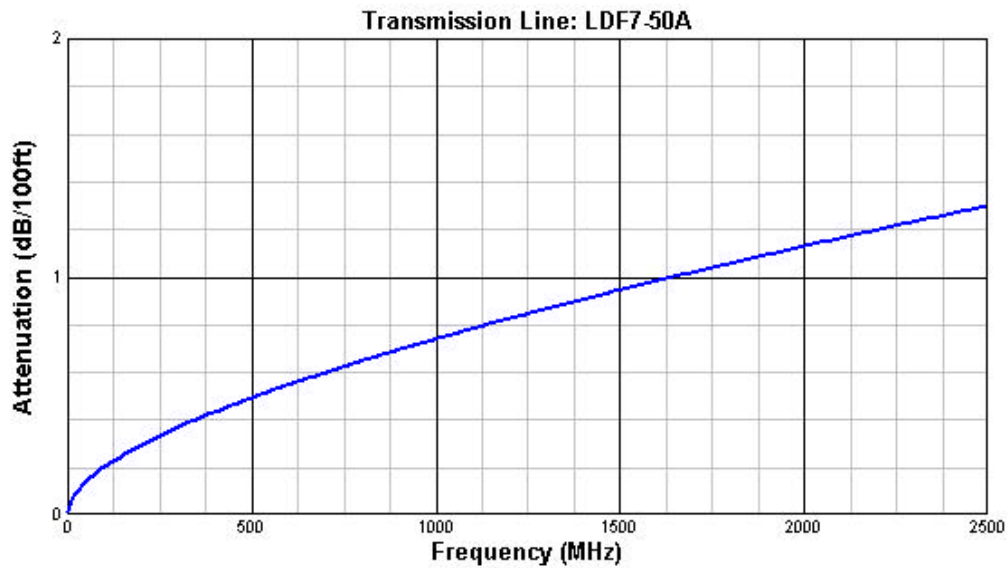
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Attenuation and Average Power Ratings

Frequency (MHz)	Attenuation (dB/100ft)	Attenuation (dB/100m)	Average Power (kW)
2500	1.301	4.267	2.58



Standard Conditions:

For Attenuation. VSWR 1.0, ambient temperature 20°C (68°F).

For Average Power. VSWR 1.0, ambient temperature 40°C (104°F), inner conductor temperature 100°C (212°F); no solar loading.

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