

# L2A-PNMNM-50M



## Product Classification

Product Type	SureFlex® standard
Product Brand	HELIAX®   SureFlex®
Product Series	LDF2-50

## General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Straight
Interface, Connector A	N Male
Interface, Connector B	N Male
Specification Sheet Revision Level	A

## Dimensions

Length	50 m   164.042 ft
Nominal Size	3/8 in

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–3000 MHz	1.44	15

## Jumper Assembly Sample Label

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## Environmental Specifications

**Immersion Test Method** Meets IEC 60529:2001, IP68 in mated condition

## Included Products

- LDF2-50 – LDF2-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

# LDF2-50



LDF2-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

## Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®   SureFlex®
Product Series	LDF2-50

## General Specifications

Product Number	520098202/00   SZ520098202/00
Flexibility	Standard
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%

## Dimensions

Diameter Over Dielectric	8.636 mm   0.34 in
Diameter Over Jacket	11.176 mm   0.44 in
Inner Conductor OD	3.124 mm   0.123 in
Outer Conductor OD	9.652 mm   0.38 in
Nominal Size	3/8 in

## Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	75.5 pF/m   23.012 pF/ft
dc Resistance, Inner Conductor	3.478 ohms/km   1.06 ohms/kft
dc Resistance, Outer Conductor	2.854 ohms/km   0.87 ohms/kft
dc Test Voltage	2500 V
Inductance	0.19 µH/m   0.058 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	5000 V
Operating Frequency Band	1 – 13000 MHz

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Peak Power	15.6 kW
Velocity	85 %

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.332	0.101	15.6
1.5	0.407	0.124	15.6
2.0	0.471	0.143	15.6
10.0	1.059	0.323	7.28
20.0	1.503	0.458	5.13
30.0	1.847	0.563	4.17
50.0	2.397	0.73	3.22
85.0	3.146	0.959	2.45
88.0	3.203	0.976	2.41
100.0	3.421	1.043	2.25
108.0	3.559	1.085	2.17
150.0	4.219	1.286	1.83
174.0	4.558	1.389	1.69
200.0	4.901	1.494	1.57
204.0	4.952	1.509	1.56
300.0	6.062	1.847	1.27
400.0	7.057	2.151	1.09
450.0	7.513	2.29	1.03
460.0	7.601	2.317	1.01
500.0	7.947	2.422	0.97
512.0	8.048	2.453	0.96
600.0	8.761	2.67	0.88
700.0	9.519	2.901	0.81
800.0	10.232	3.119	0.75
824.0	10.398	3.169	0.74
894.0	10.869	3.313	0.71
960.0	11.299	3.444	0.68
1000.0	11.554	3.521	0.67
1218.0	12.874	3.924	0.6
1250.0	13.059	3.98	0.59

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1500.0	14.446	4.403	0.53
1700.0	15.49	4.721	0.5
1794.0	15.964	4.866	0.48
1800.0	15.994	4.875	0.48
2000.0	16.97	5.172	0.45
2100.0	17.443	5.316	0.44
2200.0	17.908	5.458	0.43
2300.0	18.365	5.597	0.42
2500.0	19.257	5.869	0.4
2700.0	20.122	6.133	0.38
3000.0	21.376	6.515	0.36
3400.0	22.978	7.003	0.34
3600.0	23.754	7.24	0.32
3700.0	24.136	7.356	0.32
3800.0	24.514	7.471	0.31
3900.0	24.888	7.586	0.31
4000.0	25.26	7.699	0.31
4100.0	25.627	7.811	0.3
4200.0	25.992	7.922	0.3
4300.0	26.354	8.032	0.29
4400.0	26.713	8.142	0.29
4500.0	27.069	8.25	0.28
4600.0	27.422	8.358	0.28
4700.0	27.773	8.465	0.28
4800.0	28.12	8.571	0.27
4900.0	28.466	8.676	0.27
5000.0	28.809	8.781	0.27
6000.0	32.121	9.79	0.24
8000.0	38.244	11.656	0.2
8800.0	40.551	12.359	0.19
10000.0	43.894	13.378	0.18
12000.0	49.209	14.998	0.16

## Material Specifications

Dielectric Material	Foam PE
Jacket Material	PE

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Inner Conductor Material	Copper-clad aluminum wire
Outer Conductor Material	Corrugated copper

## Mechanical Specifications

Minimum Bend Radius, multiple Bends	95.25 mm   3.75 in
Minimum Bend Radius, single Bend	40.64 mm   1.6 in
Number of Bends, minimum	15
Number of Bends, typical	50
Tensile Strength	113 kg   249.122 lb
Bending Moment	1.9 N-m   16.816 in lb
Flat Plate Crush Strength	2 kg/mm   111.995 lb/in

## Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)
Attenuation, Ambient Temperature	68 °F   20 °C
Average Power, Ambient Temperature	104 °F   40 °C
Average Power, Inner Conductor Temperature	212 °F   100 °C

## Packaging and Weights

Cable weight	0.12 kg/m   0.081 lb/ft
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.andrew.com/ProductCompliance">www.andrew.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

