L2-PSMSM-3M5-HF

LDF2-50 Jumper with interface types SMA Male and SMA Male, 3.5 M



Product Classification

Product Type Wireless transmission cable assembly

Product Brand HELIAX®
Product Series LDF2-50

General Specifications

Body Style, Connector AStraightBody Style, Connector BStraightInterface, Connector ASMA MaleInterface, Connector BSMA Male

Specification Sheet Revision Level A

Dimensions

Length 3.5 m | 11.483 ft

Nominal Size 3/8 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

45–13000 MHz 1.58 13

Jumper Assembly Sample Label



L2-PSMSM-3M5-HF



Environmental Specifications

Immersion Test Method

Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

Agency

Classification

ISO 9001:2015

Designed, manufactured and/or distributed under this quality management system

Included Products

LDF2-50

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





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 NoteAttenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric8.636 mm | 0.34 inDiameter Over Jacket11.176 mm | 0.44 inInner Conductor OD3.124 mm | 0.123 inOuter Conductor OD9.652 mm | 0.38 in

Nominal Size 3/8 in

Electrical Specifications

Cable Impedance50 ohm ±1 ohm

 $\textbf{Capacitance} \hspace{1.5cm} 75.5 \, \text{pF/m} \hspace{.1cm} | \hspace{.1cm} 23.012 \, \text{pF/ft}$

dc Resistance, Inner Conductor3.478 ohms/km | 1.06 ohms/kftdc Resistance, Outer Conductor2.854 ohms/km | 0.87 ohms/kft

dc Test Voltage 2500 V

 $\label{eq:local_potential} \mbox{Inductance} \qquad \qquad 0.19 \ \mu\mbox{H/m} \ \mid \ 0.058 \ \mu\mbox{H/ft}$

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 13000 MHz



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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 MaterialFoam PEJacket MaterialPE



LDF2-50

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends95.25 mm3.75 inMinimum Bend Radius, single Bend40.64 mm1.6 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 $-40 \, ^{\circ}\text{C}$ to $+60 \, ^{\circ}\text{C}$ ($-40 \, ^{\circ}\text{F}$ to $+140 \, ^{\circ}\text{F}$)Operating Temperature $-55 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-67 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)Storage Temperature $-70 \, ^{\circ}\text{C}$ to $+85 \, ^{\circ}\text{C}$ ($-94 \, ^{\circ}\text{F}$ to $+185 \, ^{\circ}\text{F}$)

Attenuation, Ambient Temperature68 °F | 20 °CAverage Power, Ambient Temperature104 °F | 40 °CAverage Power, Inner Conductor Temperature212 °F | 100 °C

Packaging and Weights

Cable weight 0.12 kg/m | 0.081 lb/ft

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 www.andrew.com/ProductCompliance

ROHS Compliant UK-ROHS Compliant



