L4A-HPHMHR-1M

LDF4-50A SureFlex® Jumper with interface types 4.3-10 Male Right angle and 4.3-10 Male, 1 m



Product Classification

Product Type SureFlex® HP, HELIAX® performance

Product Series LDF4-50A

General Specifications

Body Style, Connector ARight angleBody Style, Connector BStraightInterface, Connector A4.3-10 MaleInterface, Connector B4.3-10 Male

Specification Sheet Revision Level A

Dimensions

Length 1 m | 3.281 ft

Nominal Size 1/2 in

Electrical Specifications

3rd Order IMD Static Test Method Two +43 dBm carriers

 3rd Order IMD, typical
 -119 dBm

 DTF, Connector A
 -34 dB

 DTF, Connector B
 -34 dB

VSWR/Return Loss

Frequency Band	VSWR, typical	Return Loss, typical (dB)
3.41-4.0 GHz	1.222	20.01
680-960 MHz	1.083	27.99
1700-2200 MHz	1.083	27.99

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2200–2700 MHz 1.135 23.98

Jumper Assembly Sample Label



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

LDF4-50A

LDF4-50A, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket (Halogen free jacketing non-fire-retardant)





LDF4-50A, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket (Halogen free jacketing non-fire-retardant)

Product Classification

Product Type Coaxial wireless cable

Product Brand HELIAX®

Product Series LDF4-50A

Ordering Note CommScope® standard product (Global)

General Specifications

Flexibility Standard

Jacket Color Black

Performance NoteAttenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 12.954 mm | 0.51 in

 Diameter Over Jacket
 15.875 mm | 0.625 in

 Inner Conductor OD
 4.826 mm | 0.19 in

 Outer Conductor OD
 13.97 mm | 0.55 in

Nominal Size 1/2 in

Electrical Specifications

Cable Impedance 50 ohm ±1 ohm

Capacitance 75.8 pF/m | 23.104 pF/ft

dc Resistance, Inner Conductor1.48 ohms/km | 0.451 ohms/kftdc Resistance, Outer Conductor1.9 ohms/km | 0.579 ohms/kft

dc Test Voltage 4000 V

Inductance 0.19 μ H/m | 0.058 μ H/ft

COMMSCOPE®

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 8000 V

Operating Frequency Band 1 – 8800 MHz

 Peak Power
 40 kW

 Velocity
 88 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.13	24.3
800-960 MHz	1.13	24.3
1700-2200 MHz	1.13	24.3
2300-2700 MHz	1.13	24.3

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.211	0.064	36.11
1.5	0.259	0.079	29.46
2.0	0.299	0.091	25.5
10.0	0.672	0.205	11.35
20.0	0.954	0.291	7.99
30.0	1.172	0.357	6.51
50.0	1.521	0.463	5.02
85.0	1.995	0.608	3.82
88.0	2.031	0.619	3.76
100.0	2.169	0.661	3.52
108.0	2.256	0.688	3.38
150.0	2.673	0.815	2.85
174.0	2.887	0.88	2.64
200.0	3.103	0.946	2.46
204.0	3.135	0.956	2.43
300.0	3.835	1.169	1.99
400.0	4.462	1.36	1.71
450.0	4.749	1.447	1.61
460.0	4.804	1.464	1.59
500.0	5.021	1.53	1.52

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512.0	5.085	1.55	1.5
600.0	5.533	1.686	1.38
700.0	6.009	1.831	1.27
800.0	6.456	1.968	1.18
824.0	6.56	1.999	1.16
894.0	6.855	2.089	1.11
960.0	7.124	2.171	1.07
1000.0	7.284	2.22	1.05
1218.0	8.11	2.472	0.94
1250.0	8.226	2.507	0.93
1500.0	9.093	2.771	0.84
1700.0	9.744	2.97	0.78
1794.0	10.039	3.06	0.76
1800.0	10.058	3.066	0.76
2000.0	10.666	3.251	0.72
2100.0	10.961	3.341	0.7
2200.0	11.251	3.429	0.68
2300.0	11.535	3.516	0.66
2500.0	12.09	3.685	0.63
2700.0	12.627	3.849	0.6
3000.0	13.407	4.086	0.57
3400.0	14.401	4.389	0.53
3600.0	14.882	4.536	0.51
3700.0	15.118	4.608	0.5
3800.0	15.353	4.679	0.5
3900.0	15.585	4.75	0.49
4000.0	15.815	4.82	0.48
4100.0	16.042	4.889	0.48
4200.0	16.268	4.958	0.47
4300.0	16.492	5.027	0.46
4400.0	16.714	5.094	0.46
4500.0	16.934	5.161	0.45
4600.0	17.153	5.228	0.44
4700.0	17.37	5.294	0.44
4800.0	17.585	5.36	0.43

4900.0	17.798	5.425	0.43
5000.0	18.01	5.489	0.42
6000.0	20.055	6.113	0.38
8000.0	23.826	7.262	0.32
8800.0	25.244	7.694	0.3

Material Specifications

Dielectric MaterialFoam PEJacket MaterialPE

Inner Conductor Material Copper-clad aluminum wire

Outer Conductor Material Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends127 mm | 5 inMinimum Bend Radius, single Bend50.8 mm | 2 in

Number of Bends, minimum 15 Number of Bends, typical 50

 Tensile Strength
 113 kg | 249.122 lb

 Bending Moment
 3.8 N-m | 33.633 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 0.22 kg/m | 0.148 lb/ft

Regulatory Compliance/Certifications

Agency Classification

COMMSCOPE®

CENELEC EN 50575 compliant, Declaration of Performance (DoP) available

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.commscope.com/ProductCompliance

ROHS Compliant

