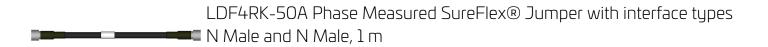
_4RNA-PNMNM-1M



Product Classification

Product Type Wireless transmission cable assembly

Product Brand HELIAX® | SureFlex®

Product Series LDF4-50A

General Specifications

Body Style, Connector A Straight Straight **Body Style, Connector B** N Male Interface, Connector A N Male Interface, Connector B Α

Specification Sheet Revision Level

Dimensions

Length 1 m | 3.281 ft

Nominal Size 1/2 in

Electrical Specifications

DTF, Connector A -32 dB **DTF, Connector B** -32 dB

Jumper Assembly Sample Label



L4RNA-PNMNM-1M



Environmental Specifications

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Rating\$1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

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

LDF4RK-50A

LDF4-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-s1a-d1,a1 (CPR testing is conducted annually please reference the website for latest classification)





LDF4-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1/2 in, black non-halogenated, fire retardant polyolefin jacket B2ca-sla-dl,al (CPR testing is conducted annually please reference the website for latest classification)

Product Classification

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

Product Series LDF4-50A

Ordering Note ANDREW® standard product in Asia Pacific | ANDREW® standard

product in Europe, the Middle East, and Africa

General Specifications

Product Number 520095002/00 | SZ520095002/00

Flexibility Standard

Jacket Color Black

Performance Note Attenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 12.954 mm | 0.51 in

 Diameter Over Jacket
 16.002 mm | 0.63 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/km0.451 ohms/kftdc Resistance, Outer Conductor2.69 ohms/km0.82 ohms/kft

 $\mbox{dc Test Voltage} \qquad \qquad 4000 \ \mbox{V}$

Inductance $0.19 \, \mu H/m \, \mid \, 0.058 \, \mu H/ft$

Insulation Resistance 100000 M0hms-km

ANDREW® an Amphenol company

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 8800 MHz

Peak Power40 kWVelocity88 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.13	24.3
800-960 MHz	1.13	24.3
1700-2000 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
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 Material Foam PE

Jacket Material Non-halogenated, fire retardant polyolefin

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, minimum15Number of Bends, typical50

 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 $-40 \, ^{\circ}\text{C to } +60 \, ^{\circ}\text{C (-40 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})}$ Storage Temperature $-40 \, ^{\circ}\text{C to } +60 \, ^{\circ}\text{C (-40 \, ^{\circ}\text{F to } +140 \, ^{\circ}\text{F})}$

Attenuation, Ambient Temperature $68 \,^{\circ}\text{F} \mid 20 \,^{\circ}\text{C}$ Average Power, Ambient Temperature $104 \,^{\circ}\text{F} \mid 40 \,^{\circ}\text{C}$ Average Power, Inner Conductor Temperature $212 \,^{\circ}\text{F} \mid 100 \,^{\circ}\text{C}$

EN50575 CPR Cable EuroClass Fire PerformanceB2caEN50575 CPR Cable EuroClass Smoke Ratings1aEN50575 CPR Cable EuroClass Droplets Ratingd1EN50575 CPR Cable EuroClass Acidity Ratinga1

Fire Retardancy Test Method IEC 60332-1-2 | NFPA 130-2010 | UL 1666/CATVR/CMR

Smoke Index Test Method IEC 61034



Toxicity Index Test Method IEC 60754-1 | IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} 0.25 \ \text{kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.168 \ \text{lb/ft}$

Regulatory Compliance/Certifications

Agency Classification

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.andrew.com/ProductCompliance

ROHS Compliant
UK-ROHS Compliant
UL/ETL Certification CATVR/CMR



