L4R-HPHMHM-3M-SGW



LDF4RK-50A SureFlex® Jumper with interface types 4.3-10 Male and 4.3-10 Male with HELIAX® SureGuard weatherproofing, 3 m

WARNING: DO NOT MATE WITH 4.1-9.5 DIN

Product Classification

Product Type SureFlex® HP, HELIAX® performance

Product Brand HELIAX® | SureFlex®

Product Series LDF4-50A

Ordering Note CommScope® standard product in the United States and Canada

General Specifications

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

Specification Sheet Revision Level

Dimensions

Length 3 m | 9.843 ft

Nominal Size 1/2 in

Electrical Specifications

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

3rd Order IMD, typical-119 dBmDTF, Connector A-34 dBDTF, Connector B-34 dB

VSWR/Return Loss

Frequency Band VSWR, typical Return Loss, typical (dB)

680–960 MHz 1.065 30.04

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| 1700-2200 MHz | 1.065 | 30.04 |
|---------------|-------|-------|
| 2200-2700 MHz | 1.083 | 27.99 |
| 3400-3800 MHz | 1.222 | 20.01 |

Jumper Assembly Sample Label



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 MethodMeets IEC 60529:2001, IP68 in mated conditionWeatherproofing MethodHELIAX® SureGuard weatherproofing boot

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 (General propose cable for outdoor use only)

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

Product Classification

Product Type Coaxial wireless cable

Product Brand HELIAX®
Product Series LDF4-50A

Ordering Note CommScope® standard product (Global)

General Specifications

Product Number 520094002/00 | SZ520094902/00

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
 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 Conductor2.69 ohms/km | 0.82 ohms/kft

dc Test Voltage 4000 V



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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 |
| | | | |

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| 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
 PE

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

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 UK-ROHS Compliant

