F4S-HMDR-3M-P

RSJ4-50 SureFlex® Jumper with interface types 4.3-10 Male and 7-16 DIN Right Angle Male, 3 m

WARNING: DO NOT MATE WITH 4.1-9.5 DIN

Product Classification

Product Type SureFlex® Premium, static PIM

Product Brand HELIAX® | SureFlex®

Product Series RSJ4-50

General Specifications

Body Style, Connector AStraightBody Style, Connector BRight angleInterface, Connector A4.3-10 MaleInterface, Connector B7-16 DIN Male

Specification Sheet Revision Level A

Dimensions

Length 3 m | 9.843 ft

Nominal Size 1/2 in

Electrical Specifications

3rd Order IMD Static -116 dBm

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

 DTF, Connector A
 34 dB

 DTF, Connector B
 34 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698-960 MHz	1.083	27.99
1700-2200 MHz	1.083	27.99
2200-2700 MHz	1.135	23.98



F4S-HMDR-3M-P

Jumper Assembly Sample Label



Environmental Specifications

Immersion Test Method

Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above 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/Exempted
UK-ROHS	Compliant/Exempted



Included Products

RSJ4-50 - RSJ4-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket

COMMSCOPE®



RSJ4-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, black PE jacket

Product Classification

Product Type Coaxial wireless cable

Product Brand HELIAX® | SureFlex®

Product Series RSJ4-50

Ordering Note CommScope® standard product (Global)

General Specifications

Flexibility Superflexible

Jacket Color Black

Performance NoteAttenuation values typical, guaranteed within 5%

Dimensions

 Diameter Over Dielectric
 9.423 mm | 0.371 in

 Diameter Over Jacket
 13.411 mm | 0.528 in

 Inner Conductor OD
 3.594 mm | 0.141 in

 Outer Conductor OD
 11.989 mm | 0.472 in

Nominal Size 1/2 in

Electrical Specifications

Cable Impedance50 ohm ±1 ohm

Capacitance 83.9 pF/m | 25.573 pF/ft

dc Resistance, Inner Conductor2.65 ohms/km0.808 ohms/kftdc Resistance, Outer Conductor4.56 ohms/km1.39 ohms/kft

dc Test Voltage 2500 V

Inductance 0.213 μ H/m | 0.065 μ H/ft

COMMSCOPE®

Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 10200 MHz

 Peak Power
 15.6 kW

 Velocity
 79 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
680-800 MHz	1.201	20.79
800-960 MHz	1.201	20.79
1700-2200 MHz	1.201	20.79
2300-2700 MHz	1.201	20.79

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.327	0.1	15.6
1.5	0.401	0.122	15.6
2.0	0.463	0.141	15.6
10.0	1.044	0.318	10.14
20.0	1.485	0.453	7.12
30.0	1.828	0.557	5.79
50.0	2.377	0.724	4.45
85.0	3.13	0.954	3.38
88.0	3.187	0.971	3.32
100.0	3.406	1.038	3.11
108.0	3.546	1.081	2.98
150.0	4.214	1.285	2.51
174.0	4.558	1.389	2.32
200.0	4.908	1.496	2.16
204.0	4.96	1.512	2.13
300.0	6.095	1.858	1.74
400.0	7.121	2.17	1.49
450.0	7.592	2.314	1.39
460.0	7.684	2.342	1.38
500.0	8.042	2.451	1.32

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512.0	8.148	2.483	1.3
600.0	8.891	2.71	1.19
700.0	9.683	2.951	1.09
800.0	10.431	3.179	1.01
824.0	10.605	3.232	1
894.0	11.101	3.383	0.95
960.0	11.555	3.522	0.92
1000.0	11.824	3.604	0.89
1218.0	13.226	4.031	0.8
1250.0	13.423	4.091	0.79
1500.0	14.906	4.543	0.71
1700.0	16.027	4.885	0.66
1794.0	16.537	5.04	0.64
1800.0	16.57	5.05	0.64
2000.0	17.624	5.371	0.6
2100.0	18.137	5.528	0.58
2200.0	18.641	5.682	0.57
2300.0	19.138	5.833	0.55
2500.0	20.11	6.129	0.53
2700.0	21.056	6.418	0.5
3000.0	22.432	6.837	0.47
3400.0	24.198	7.375	0.44
3600.0	25.055	7.636	0.42
3700.0	25.478	7.765	0.42
3800.0	25.898	7.893	0.41
3900.0	26.314	8.02	0.4
4000.0	26.727	8.146	0.4
4100.0	27.136	8.271	0.39
4200.0	27.542	8.394	0.38
4300.0	27.946	8.517	0.38
4400.0	28.346	8.639	0.37
4500.0	28.744	8.761	0.37
4600.0	29.139	8.881	0.36
4700.0	29.531	9.001	0.36
4800.0	29.921	9.119	0.35

4900.0	30.308	9.238	0.35
5000.0	30.693	9.355	0.34
6000.0	34.427	10.493	0.31
8000.0	41.403	12.619	0.26
8800.0	44.054	13.427	0.24
10000.0	47.914	14.603	0.22

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 Bends31.75 mm1.25 inMinimum Bend Radius, single Bend31.75 mm1.25 in

Number of Bends, minimum 15 Number of Bends, typical 20

 Tensile Strength
 79 kg | 174.165 lb

 Bending Moment
 3.1 N-m | 27.437 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 Temperature 68 °F | 20 °C Average Power, Ambient Temperature 104 °F | 40 °C Average Power, Inner Conductor Temperature 212 °F | 100 °C

EN50575 CPR Cable EuroClass Fire Performance Fca

Packaging and Weights

Cable weight 0.15 kg/m | 0.101 lb/ft

COMMSCOPE®

Regulatory Compliance/Certifications

Agency Classification

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

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

CENELEC