F2A-HMHR-1M5-TMB

FSJ2-50 SureFlex® Jumper with interface types 4.3-10 Male and 4.3-10 Male Right angle, 1.5 M

- WARNING: DO NOT MATE WITH 4.1-9.5 DIN

Product Classification

Product Type	Wireless transmission cable assembly
Product Brand	HELIAX® | SureFlex®
Product Series	FSJ2-50

General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Right angle
Interface, Connector A	4.3-10 Male
Interface, Connector B	4.3-10 Male
Specification Sheet Revision Level	A

Dimensions

Length	1.5 m | 4.921 ft
Nominal Size	3/8 in

Electrical Specifications

3rd Order IMD	-117 dBm
3rd Order IMD Test Method	Two +43 dBm carriers

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
698–960 MHz	1.101	26.36
1700–2200 MHz	1.101	26.36
2200–2700 MHz	1.101	26.36

Jumper Assembly Sample Label

F2A-HMHR-1M5-TMB

Environmental Specifications

Immersion Test Method	Meets IEC 60529:2001, IP68 in mated condition

Included Products

FSJ2-50	–	FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

FSJ2-50

FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black PE jacket

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX® | SureFlex®
Product Series	FSJ2-50

General Specifications

Product Number	887019902/00 | SZ887019902/00
Flexibility	Superflexible
Jacket Color	Black
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	7.112 mm | 0.28 in
Diameter Over Jacket	10.541 mm | 0.415 in
Inner Conductor OD	2.794 mm | 0.11 in
Outer Conductor OD	9.652 mm | 0.38 in
Nominal Size	3/8 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	79.7 pF/m | 24.293 pF/ft
dc Resistance, Inner Conductor	4.232 ohms/km | 1.29 ohms/kft
dc Resistance, Outer Conductor	4.987 ohms/km | 1.52 ohms/kft
dc Test Voltage	2300 V
Inductance	0.2 µH/m | 0.061 µH/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz

FSJ2-50

Peak Power	13.2 kW
Velocity	83 %

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
2.5–2.7 GHz	1.106	25.96
680–800 MHz	1.106	25.96
800–960 MHz	1.106	25.96
1700–2200 MHz	1.101	26.36

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.383	0.117	13.2
1.5	0.469	0.143	13.2
2.0	0.542	0.165	13.2
10.0	1.219	0.372	6.97
20.0	1.732	0.528	4.91
30.0	2.128	0.649	3.99
50.0	2.762	0.842	3.08
85.0	3.626	1.105	2.34
88.0	3.691	1.125	2.3
100.0	3.943	1.202	2.16
108.0	4.103	1.25	2.07
150.0	4.864	1.482	1.75
174.0	5.254	1.601	1.62
200.0	5.65	1.722	1.5
204.0	5.709	1.74	1.49
300.0	6.99	2.13	1.22
400.0	8.139	2.481	1.04
450.0	8.665	2.641	0.98
460.0	8.767	2.672	0.97
500.0	9.166	2.794	0.93
512.0	9.283	2.829	0.92
600.0	10.107	3.081	0.84
700.0	10.983	3.347	0.77

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800.0	11.807	3.599	0.72
824.0	11.998	3.657	0.71
894.0	12.542	3.823	0.68
960.0	13.04	3.974	0.65
1000.0	13.334	4.064	0.64
1218.0	14.861	4.529	0.57
1250.0	15.075	4.595	0.56
1500.0	16.68	5.084	0.51
1700.0	17.887	5.452	0.48
1794.0	18.436	5.619	0.46
1800.0	18.47	5.629	0.46
2000.0	19.599	5.974	0.43
2100.0	20.147	6.141	0.42
2200.0	20.685	6.305	0.41
2300.0	21.214	6.466	0.4
2500.0	22.247	6.781	0.38
2700.0	23.249	7.086	0.37
3000.0	24.701	7.529	0.34
3400.0	26.558	8.094	0.32
3600.0	27.456	8.368	0.31
3700.0	27.899	8.503	0.3
3800.0	28.337	8.637	0.3
3900.0	28.771	8.769	0.3
4000.0	29.201	8.9	0.29
4100.0	29.628	9.03	0.29
4200.0	30.051	9.159	0.28
4300.0	30.47	9.287	0.28
4400.0	30.886	9.414	0.28
4500.0	31.298	9.539	0.27
4600.0	31.708	9.664	0.27
4700.0	32.114	9.788	0.26
4800.0	32.518	9.911	0.26
4900.0	32.919	10.033	0.26
5000.0	33.316	10.154	0.26
6000.0	37.158	11.325	0.23

8000.0	44.264	13.491	0.19
8800.0	46.943	14.308	0.18
10000.0	50.826	15.491	0.17
12000.0	57.001	17.373	0.15

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 Bends	25.4 mm | 1 in
Minimum Bend Radius, single Bend	25.4 mm | 1 in
Number of Bends, minimum	20
Number of Bends, typical	50
Tensile Strength	95 kg | 209.439 lb
Bending Moment	2.3 N-m | 20.357 in lb
Flat Plate Crush Strength	1.8 kg/mm | 100.795 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °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

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

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ROHS	Compliant
UK-ROHS	Compliant