F2A-PHMDR-5M



Product Classification

Product Type SureFlex® standard

Product Brand HELIAX® | SureFlex®

Product Series FSJ2-50

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 5 m | 16.404 ft

Nominal Size 3/8 in

VSWR/Return Loss

Frequency Band VSWR Return Loss (dB)

700–3000 MHz 1.44 15

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

FSJ2-50

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





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 NoteAttenuation 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 Conductor4.232 ohms/km | 1.29 ohms/kftdc Resistance, Outer Conductor4.987 ohms/km | 1.52 ohms/kft

dc Test Voltage 2300 V

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Insulation Resistance 100000 MOhms-km

Jacket Spark Test Voltage (rms) 4000 V

Operating Frequency Band 1 – 13400 MHz



Peak Power13.2 kWVelocity83 %

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



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 Bends25.4 mm | 1 inMinimum Bend Radius, single Bend25.4 mm | 1 in

Number of Bends, minimum20Number of Bends, typical50

 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 $-40 \, ^{\circ}\text{C}$ 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

 $\textbf{Cable weight} \hspace{1.5cm} 0.12 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.081 \text{ lb/ft}$

Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Below maximum concentration value

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

ANDREW® an Amphenol company

ROHS

Compliant



HS Compliant

