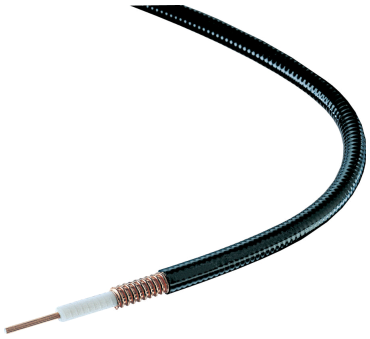
FSJ2RK-50



FSJ2-50, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 3/8 in, black non-halogenated, fire retardant polyolefin jacket B2ca s1a d0 a1 Compliant

Product Classification

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

Standards And Qualifications

EN50575 CPR Cable EuroClass	B2ca | s1a | d0 | a1

Construction Materials

Jacket Material	Non-halogenated, fire retardant polyolefin
Outer Conductor Material	Corrugated copper
Dielectric Material	Foam PE
Flexibility	Superflexible
Inner Conductor Material	Copper-clad aluminum wire
Jacket Color	Black

Dimensions

Nominal Size	3/8 in
Cable Weight	0.09 lb/ft | 0.13 kg/m
Diameter Over Dielectric	7.112 mm | 0.280 in
Diameter Over Jacket	10.922 mm | 0.430 in
Inner Conductor OD	2.7940 mm | 0.1100 in
Outer Conductor OD	9.652 mm | 0.380 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	24.0 pF/ft | 80.0 pF/m
dc Resistance, Inner Conductor	1.290 ohms/kft | 4.232 ohms/km
dc Resistance, Outer Conductor	1.520 ohms/kft | 4.987 ohms/km
dc Test Voltage	2300 V

Inductance	0.200 µH/m | 0.061 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 13400 MHz
Peak Power	13.2 kW
Velocity	83%

Environmental Specifications

Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)

Mechanical Specifications

Bending Moment	2.3 N-m | 1.7 ft lb
Fire Retardancy Test Method	IEC 60332-1 | IEC 60332-3-24 | NFPA 130-2010 | UL 1666/CATVR/CMR | UL 1685
Flat Plate Crush Strength	100.0 lb/in | 1.8 kg/mm
Minimum Bend Radius, Multiple Bends	25.40 mm | 1.00 in
Minimum Bend Radius, Single Bend	25.40 mm | 1.00 in
Number of Bends, minimum	30
Number of Bends, typical	50
Smoke Index Test Method	IEC 61034
Tensile Strength	95 kg | 210 lb
Toxicity Index Test Method	IEC 60754-1 | IEC 60754-2

Note

Performance Note	Values typical, unless otherwise stated

Standard Conditions

Attenuation, Ambient Temperature	20 °C | 68 °F
Average Power, Ambient Temperature	40 °C | 104 °F
Average Power, Inner Conductor Temperature	100 °C | 212 °F

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
680–960 MHz	1.2	20.80
1700–2200 MHz	1.2	20.80
2200–2700 MHz	1.43	15.00

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.27	0.082	13.20
1	0.383	0.117	13.20
1.5	0.469	0.143	13.20
2	0.542	0.165	13.20
10	1.219	0.372	6.97
20	1.732	0.528	4.91
30	2.128	0.649	3.99
50	2.762	0.842	3.08
85	3.626	1.105	2.34
88	3.691	1.125	2.30
100	3.943	1.202	2.16
108	4.103	1.25	2.07
150	4.864	1.482	1.75
174	5.254	1.601	1.62
200	5.65	1.722	1.50
204	5.709	1.74	1.49
300	6.99	2.13	1.22
400	8.139	2.481	1.04
450	8.665	2.641	0.98
460	8.767	2.672	0.97
460	8.767	2.672	0.97
500	9.166	2.794	0.93
512	9.283	2.829	0.92
600	10.107	3.081	0.84
700	10.983	3.347	0.77
800	11.807	3.599	0.72
824	11.998	3.657	0.71
894	12.542	3.823	0.68
960	13.04	3.974	0.65
1000	13.334	4.064	0.64
1218	14.861	4.529	0.57
1250	15.075	4.595	0.56
1500	16.68	5.084	0.51
1700	17.887	5.452	0.48
1794	18.436	5.619	0.46
1800	18.47	5.629	0.46
2000	19.599	5.974	0.43
2100	20.147	6.141	0.42
2200	20.685	6.305	0.41
2300	21.214	6.466	0.40
2500	22.247	6.78	0.38
2700	23.249	7.086	0.37
3000	24.701	7.529	0.34
3400	26.558	8.094	0.32
3700	27.899	8.503	0.30

3800	28.337	8.637	0.30
4000	29.201	8.9	0.29
5000	33.316	10.154	0.26
6000	37.158	11.325	0.23
8000	44.264	13.491	0.19
8800	46.943	14.308	0.18
10000	50.826	15.491	0.17
12000	57.001	17.373	0.15

** Values typical, guaranteed within 5%*

Regulatory Compliance/Certifications

Agency	**Classification**
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available