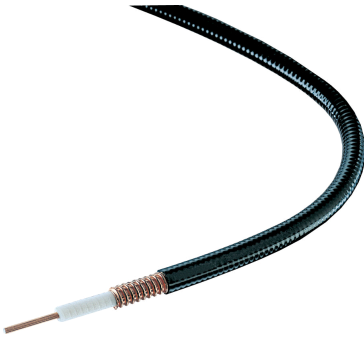


# FSJ2-50



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

## Product Classification

<b>Brand</b>	HELIAX®   SureFlex®
<b>Product Series</b>	FSJ2-50
<b>Product Type</b>	Coaxial wireless cable

## Construction Materials

<b>Jacket Material</b>	PE
<b>Outer Conductor Material</b>	Corrugated copper
<b>Dielectric Material</b>	Foam PE
<b>Flexibility</b>	Superflexible
<b>Inner Conductor Material</b>	Copper-clad aluminum wire
<b>Jacket Color</b>	Black

## Dimensions

<b>Nominal Size</b>	3/8 in
<b>Cable Weight</b>	0.08 lb/ft   0.12 kg/m
<b>Diameter Over Dielectric</b>	7.112 mm   0.280 in
<b>Diameter Over Jacket</b>	10.541 mm   0.415 in
<b>Inner Conductor OD</b>	2.7940 mm   0.1100 in
<b>Outer Conductor OD</b>	9.652 mm   0.380 in

## Electrical Specifications

<b>Cable Impedance</b>	50 ohm $\pm$ 1 ohm
<b>Capacitance</b>	24.3 pF/ft   79.7 pF/m
<b>dc Resistance, Inner Conductor</b>	1.290 ohms/kft   4.232 ohms/km
<b>dc Resistance, Outer Conductor</b>	1.520 ohms/kft   4.987 ohms/km
<b>dc Test Voltage</b>	2300 V
<b>Inductance</b>	0.200 $\mu$ H/m   0.061 $\mu$ H/ft
<b>Insulation Resistance</b>	100000 Mohms•km
<b>Jacket Spark Test Voltage (rms)</b>	4000 V

# FSJ2-50

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<b>Operating Frequency Band</b>	1 – 13400 MHz
<b>Peak Power</b>	13.2 kW
<b>Velocity</b>	83%

## Environmental Specifications

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

## Mechanical Specifications

<b>Bending Moment</b>	2.3 N-m   1.7 ft lb
<b>Flat Plate Crush Strength</b>	100.0 lb/in   1.8 kg/mm
<b>Minimum Bend Radius, Multiple Bends</b>	25.40 mm   1.00 in
<b>Minimum Bend Radius, Single Bend</b>	25.40 mm   1.00 in
<b>Number of Bends, minimum</b>	20
<b>Number of Bends, typical</b>	50
<b>Tensile Strength</b>	95 kg   210 lb

## Note

<b>Performance Note</b>	Values typical, unless otherwise stated
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## Standard Conditions

<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Average Power, Inner Conductor Temperature</b>	100 °C   212 °F

## 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
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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

RoHS 2011/65/EU

ISO 9001:2015

China RoHS SJ/T 11364-2014

### Classification

Compliant

Designed, manufactured and/or distributed under this quality management system

Below Maximum Concentration Value (MCV)

