



FSJ1-75, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/4 in, black PE jacket

OBSOLETE

Product Classification

Brand	HELIAX® SureFlex®
Product Series	FSJ1-75
Product Type	Coaxial wireless cable

Construction Materials

Jacket Material	PE
Outer Conductor Material	Corrugated copper
Dielectric Material	Foam PE
Flexibility	Superflexible
Inner Conductor Material	Copper-clad steel wire
Jacket Color	Black

Dimensions

Nominal Size	1/4 in
Cable Weight	0.15 lb/ft 0.22 kg/m
Diameter Over Dielectric	4.826 mm 0.190 in
Diameter Over Jacket	7.366 mm 0.290 in
Inner Conductor OD	1.0668 mm 0.0420 in
Outer Conductor OD	6.350 mm 0.250 in

Electrical Specifications

Cable Impedance	75 ohm \pm 3 ohm
Capacitance	17.4 pF/ft 57.1 pF/m
dc Resistance, Inner Conductor	15.000 ohms/kft
dc Resistance, Outer Conductor	1.800 ohms/kft

dc Test Voltage	2000 V
Inductance	0.322 μ H/m 0.098 μ H/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	5000 V
Operating Frequency Band	1 – 1000 MHz
Peak Power	6.7 kW
Velocity	78 %

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)

Mechanical Specifications

Bending Moment	2.7 N-m 2.0 ft lb
Flat Plate Crush Strength	105.0 lb/in 1.9 kg/mm
Minimum Bend Radius, Multiple Bends	31.75 mm 1.25 in
Number of Bends, minimum	20
Number of Bends, typical	50
Tensile Strength	64 kg 140 lb

Note

Performance Note	Values typical, unless otherwise stated
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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

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.413	0.126	6.70
1	0.585	0.178	6.70
1.5	0.718	0.219	6.70
2	0.83	0.253	6.70
10	1.871	0.57	3.00
20	2.664	0.812	2.11
30	3.278	0.999	1.71
50	4.266	1.3	1.32
85	5.62	1.713	1.00
88	5.722	1.744	0.98
100	6.118	1.865	0.92
108	6.37	1.942	0.88
150	7.574	2.309	0.74
174	8.194	2.497	0.68
200	8.825	2.69	0.64
204	8.918	2.718	0.63
300	10.97	3.343	0.51
400	12.824	3.909	0.44
450	13.678	4.169	0.41
460	13.843	4.219	0.41
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500	14.493	4.417	0.39
512	14.683	4.475	0.38
600	16.03	4.886	0.35
700	17.466	5.323	0.32
800	18.824	5.737	0.30
824	19.14	5.834	0.29
894	20.041	6.108	0.28
960	20.866	6.36	0.27
1000	21.356	6.509	0.26

* Values typical, guaranteed within 5%