

FSJ1-75A, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/4 in, gray non-halogenated, fire retardant polyolefin jacket

#### **OBSOLETE**

This product was discontinued on: December 1, 2011

#### Product Classification

 Product Type
 Coaxial wireless cable

 Product Brand
 HELIAX® | SureFlex®

**Product Series** FSJ1-75

General Specifications

**Flexibility** Superflexible

Jacket Color Gray

Performance Note Attenuation values typical, guaranteed within 5%

**Dimensions** 

Diameter Over Dielectric4.826 mm | 0.19 inDiameter Over Jacket7.366 mm | 0.29 inInner Conductor OD1.067 mm | 0.042 inOuter Conductor OD6.35 mm | 0.25 in

Nominal Size 1/4 in

**Electrical Specifications** 

**Cable Impedance** 75 ohm ±3 ohm

**Capacitance** 57.1 pF/m | 17.404 pF/ft

dc Resistance, Inner Conductor0.492 ohms/km | 0.15 ohms/kftdc Resistance, Outer Conductor0.656 ohms/km | 0.2 ohms/kft

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dc Test Voltage 2000 V

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**Insulation Resistance** 100000 MOhms-km

Jacket Spark Test Voltage (rms) 5000 V

Operating Frequency Band 1 – 1000 MHz

Peak Power6.7 kWVelocity78 %

## Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.585	0.178	6.7
1.5	0.718	0.219	6.7
2.0	0.83	0.253	6.7
10.0	1.871	0.57	3
20.0	2.664	0.812	2.11
30.0	3.278	0.999	1.71
50.0	4.266	1.3	1.32
85.0	5.62	1.713	1
88.0	5.722	1.744	0.98
100.0	6.118	1.865	0.92
108.0	6.37	1.942	0.88
150.0	7.574	2.309	0.74
174.0	8.194	2.497	0.68
200.0	8.825	2.69	0.64
204.0	8.918	2.718	0.63
300.0	10.97	3.343	0.51
400.0	12.824	3.909	0.44
450.0	13.678	4.169	0.41
460.0	13.843	4.219	0.41
500.0	14.493	4.417	0.39
512.0	14.683	4.475	0.38
600.0	16.03	4.886	0.35
700.0	17.466	5.323	0.32
800.0	18.824	5.737	0.3
824.0	19.14	5.834	0.29

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894.0	20.041	6.108	0.28
960.0	20.866	6.36	0.27
1000.0	21.356	6.509	0.26

#### Material Specifications

**Dielectric Material** Foam PE

Jacket Material Non-halogenated, fire retardant polyolefin

 Inner Conductor Material
 Copper-clad steel wire

 Outer Conductor Material
 Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends 1.25 in | 31.75 mm

Number of Bends, minimum 20 Number of Bends, typical 50

 Tensile Strength
 64 kg | 141.096 lb

 Bending Moment
 2.7 N-m | 23.897 in lb

 Flat Plate Crush Strength
 1.9 kg/mm | 106.395 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 °CFire Retardancy Test MethodUL 1666/CATVR

Smoke Index Test Method IEC 61034

**Toxicity Index Test Method** IEC 60754-1 | IEC 60754-2

Packaging and Weights

 $\textbf{Cable weight} \hspace{1.5cm} 0.22 \text{ kg/m} \hspace{0.2cm} \mid \hspace{0.2cm} 0.148 \text{ lb/ft}$ 

Regulatory Compliance/Certifications

Agency Classification

COMMSC PE®

**UL/ETL** Certification

CATVR



