

FSJ4RN-75A



FSJ4-75A, HELIAX® Superflexible Foam Coaxial Cable, corrugated copper, 1/2 in, gray non-halogenated, fire retardant polyolefin jacket

Product Classification

Brand	HELIAX®
Product Series	FSJ4-75A
Product Type	Coaxial wireless cable

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 steel wire
Jacket Color	Gray

Dimensions

Nominal Size	1/2 in
Cable Weight	0.15 lb/ft 0.22 kg/m
Diameter Over Dielectric	9.398 mm 0.370 in
Diameter Over Jacket	13.462 mm 0.530 in
Inner Conductor OD	2.0320 mm 0.0800 in
Outer Conductor OD	12.192 mm 0.480 in

Electrical Specifications

Cable Impedance	75 ohm \pm 2 ohm
Capacitance	16.7 pF/ft 54.8 pF/m
dc Resistance, Inner Conductor	1.500 ohms/kft 4.922 ohms/km
dc Resistance, Outer Conductor	1.000 ohms/kft 3.281 ohms/km
dc Test Voltage	2500 V
Inductance	0.308 μ H/m 0.094 μ H/ft
Insulation Resistance	100000 Mohms•km

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Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 1000 MHz
Peak Power	10.0 kW
Velocity	81 %

Environmental Specifications

Installation Temperature	-25 °C to +60 °C (-13 °F to +140 °F)
Operating Temperature	-30 °C to +80 °C (-22 °F to +176 °F)
Storage Temperature	-30 °C to +80 °C (-22 °F to +176 °F)

Mechanical Specifications

Bending Moment	2.7 N-m 2.0 ft lb
Fire Retardancy Test Method	UL 1666/CATVR
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
Smoke Index Test Method	IEC 61034
Tensile Strength	64 kg 140 lb
Toxicity Index Test Method	IEC 60754-1 IEC 60754-2

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	0.213	0.065	10.00
1	0.301	0.092	10.00
1.5	0.369	0.112	10.00
2	0.427	0.13	10.00
10	0.962	0.293	5.83
20	1.369	0.417	4.10
30	1.685	0.514	3.33
50	2.192	0.668	2.56
85	2.887	0.88	1.94
88	2.94	0.896	1.91
100	3.143	0.958	1.79
108	3.272	0.997	1.71
150	3.89	1.186	1.44
174	4.208	1.283	1.33
200	4.532	1.381	1.24
204	4.58	1.396	1.23
300	5.632	1.716	1.00
400	6.582	2.006	0.85
450	7.019	2.139	0.80
460	7.104	2.165	0.79
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500	7.437	2.267	0.75
512	7.535	2.296	0.74
600	8.224	2.507	0.68
700	8.96	2.731	0.63
800	9.655	2.943	0.58
824	9.817	2.992	0.57
894	10.278	3.133	0.55
960	10.701	3.261	0.52
1000	10.951	3.338	0.51

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

Agency

UL/ETL Certification

Classification

CATVR

