

FSJ4RN-75A



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

OBSOLETE

This product was discontinued on: December 13, 2010

Product Classification

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

General Specifications

Flexibility	Superflexible
Jacket Color	Gray
Performance Note	Attenuation values typical, guaranteed within 5%

Dimensions

Diameter Over Dielectric	9.398 mm 0.37 in
Diameter Over Jacket	13.462 mm 0.53 in
Inner Conductor OD	2.032 mm 0.08 in
Outer Conductor OD	12.192 mm 0.48 in
Nominal Size	1/2 in

Electrical Specifications

Cable Impedance	75 ohm \pm 2 ohm
Capacitance	54.8 pF/m 16.703 pF/ft
dc Resistance, Inner Conductor	4.922 ohms/km 1.5 ohms/kft
dc Resistance, Outer Conductor	3.281 ohms/km 1 ohms/kft

FSJ4RN-75A

dc Test Voltage	2500 V
Inductance	0.308 μ H/m 0.094 μ H/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 1000 MHz
Peak Power	10 kW
Velocity	81 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
1.0	0.301	0.092	10
1.5	0.369	0.112	10
2.0	0.427	0.13	10
10.0	0.962	0.293	5.83
20.0	1.369	0.417	4.1
30.0	1.685	0.514	3.33
50.0	2.192	0.668	2.56
85.0	2.887	0.88	1.94
88.0	2.94	0.896	1.91
100.0	3.143	0.958	1.79
108.0	3.272	0.997	1.71
150.0	3.89	1.186	1.44
174.0	4.208	1.283	1.33
200.0	4.532	1.381	1.24
204.0	4.58	1.396	1.23
300.0	5.632	1.716	1
400.0	6.582	2.006	0.85
450.0	7.019	2.139	0.8
460.0	7.104	2.165	0.79
500.0	7.437	2.267	0.75
512.0	7.535	2.296	0.74
600.0	8.224	2.507	0.68
700.0	8.96	2.731	0.63
800.0	9.655	2.943	0.58
824.0	9.817	2.992	0.57

FSJ4RN-75A

894.0	10.278	3.133	0.55
960.0	10.701	3.261	0.52
1000.0	10.951	3.338	0.51

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	31.75 mm 1.25 in
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	-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)
Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	212 °F 100 °C
Fire Retardancy Test Method	UL 1666/CATVR
Smoke Index Test Method	IEC 61034
Toxicity Index Test Method	IEC 60754-1 IEC 60754-2

Packaging and Weights

Cable weight	0.22 kg/m 0.148 lb/ft
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Regulatory Compliance/Certifications

Agency	Classification
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FSJ4RN-75A

UL/ETL Certification

CATVR

