



LDF6-50

LDF6-50, HELIAX® Low Density Foam Coaxial Cable, corrugated copper, 1-1/4 in, black PE jacket

OBSOLETE

This product was discontinued on: April 20, 2009

Replaced By

AVA6-50	AVA6-50, HELIAX® Andrew Virtual Air™ Coaxial Cable, corrugated copper, 1-1/4 in, black PE jacket
AVA6P-50-43B	AVA6-50, HELIAX® Andrew Virtual Air™ Coaxial Cable, corrugated copper, 1-1/4 in, black PE jacket

Construction Materials

Jacket Material	PE
Outer Conductor Material	Corrugated copper
Dielectric Material	Foam PE
Flexibility	Standard
Inner Conductor Material	Copper tube
Jacket Color	Black

Dimensions

Nominal Size	1-1/4 in
Cable Weight	0.60 lb/ft 0.89 kg/m
Diameter Over Dielectric	33.782 mm 1.330 in
Diameter Over Jacket	39.370 mm 1.550 in
Inner Conductor OD	13.2080 mm 0.5200 in
Outer Conductor OD	35.814 mm 1.410 in

Electrical Specifications

Cable Impedance	50 ohm ±1 ohm
Capacitance	22.9 pF/ft 75.1 pF/m
dc Resistance, Inner Conductor	0.220 ohms/kft 0.722 ohms/km
dc Resistance, Outer Conductor	0.190 ohms/kft 0.623 ohms/km
dc Test Voltage	9000 V
Inductance	0.184 µH/m 0.056 µH/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	10000 V
Operating Frequency Band	1 – 3300 MHz
Peak Power	205.0 kW
Velocity	89%

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)

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Storage Temperature -70 °C to +85 °C (-94 °F to +185 °F)

General Specifications

Brand HELIAX®

Mechanical Specifications

Bending Moment	48.8 N-m 36.0 ft lb
Flat Plate Crush Strength	125.0 lb/in 2.2 kg/mm
Minimum Bend Radius, Multiple Bends	381.00 mm 15.00 in
Minimum Bend Radius, Single Bend	152.40 mm 6.00 in
Number of Bends, minimum	15
Number of Bends, typical	40
Tensile Strength	590 kg 1300 lb

Note

Performance Note Values typical, unless otherwise stated

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

Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
806–990 MHz	1.13	24.29
1700–2000 MHz	1.13	24.29

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Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.053	0.016	180.58
1	0.075	0.023	127.47
1.5	0.092	0.028	103.95
2	0.107	0.033	89.92
10	0.241	0.074	39.82
20	0.344	0.105	27.95
30	0.423	0.129	22.69
50	0.551	0.168	17.42
85	0.727	0.222	13.20
88	0.741	0.226	12.96
100	0.792	0.242	12.12
108	0.825	0.252	11.64
150	0.982	0.299	9.78
174	1.063	0.324	9.03
200	1.146	0.349	8.38
204	1.158	0.353	8.29
300	1.427	0.435	6.73
400	1.671	0.509	5.75
450	1.784	0.544	5.38
500	1.891	0.576	5.08
512	1.917	0.584	5.01
600	2.095	0.638	4.58
700	2.285	0.696	4.20
800	2.465	0.751	3.90
824	2.507	0.764	3.83
894	2.627	0.801	3.66
960	2.737	0.834	3.51
1000	2.802	0.854	3.43
1218	3.142	0.958	3.06
1250	3.19	0.972	3.01
1500	3.551	1.082	2.70
1700	3.825	1.166	2.51
1800	3.958	1.206	2.43
2000	4.216	1.285	2.28
2100	4.342	1.323	2.21
2200	4.466	1.361	2.15
2300	4.588	1.398	2.09
2500	4.828	1.472	1.99
2700	5.062	1.543	1.90
3000	5.402	1.646	1.78

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant
China RoHS SJ/T 11364-2006	Below Maximum Concentration Value (MCV)

