

ETS057-50T



ETS057-50T, HELIAX® Superflexible High Power, High Temperature Foam Coaxial Cable, corrugated copper, 5.7 mm, blue PVDF jacket

OBSOLETE

Product Classification

Brand	HELIAX® SureFlex®
Product Series	ETS057-50T
Product Type	Coaxial wireless cable

Construction Materials

Jacket Material	PVDF
Outer Conductor Material	Corrugated copper
Dielectric Material	Expanded PTFE
Flexibility	Superflexible
Inner Conductor Material	Silver-plated copper wire
Jacket Color	Blue

Dimensions

Nominal Size	5.7 mm
Cable Weight	0.05 lb/ft 0.07 kg/m
Diameter Over Dielectric	4.064 mm 0.160 in
Diameter Over Jacket	6.858 mm 0.270 in
Inner Conductor OD	1.5240 mm 0.0600 in
Outer Conductor OD	5.842 mm 0.230 in

Electrical Specifications

Cable Impedance	50 ohm \pm 2 ohm
Capacitance	25.7 pF/ft 84.3 pF/m
dc Resistance, Inner Conductor	2.600 ohms/kft 8.531 ohms/km
dc Resistance, Outer Conductor	3.000 ohms/kft 9.843 ohms/km
dc Test Voltage	1500 V
Inductance	0.217 μ H/m 0.066 μ H/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 18000 MHz
Peak Power	5.6 kW
Velocity	78 %

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Environmental Specifications

Installation Temperature	-30 °C to +60 °C (-22 °F to +140 °F)
Operating Temperature	-40 °C to +150 °C (-40 °F to +302 °F)
Storage Temperature	-40 °C to +85 °C (-40 °F to +185 °F)

Mechanical Specifications

Bending Moment	1.4 N-m 1.0 ft lb
Flat Plate Crush Strength	35.0 lb/in 0.6 kg/mm
Minimum Bend Radius, Multiple Bends	12.70 mm 0.50 in
Minimum Bend Radius, Single Bend	9.65 mm 0.38 in
Number of Bends, minimum	15
Number of Bends, typical	20
Tensile Strength	20 kg 45 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	200 °C 392 °F

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.49	0.149	5.60
1	0.694	0.212	5.60
1.5	0.851	0.259	5.60
2	0.983	0.3	5.60
10	2.208	0.673	5.60
20	3.133	0.955	5.60
30	3.847	1.172	4.73
50	4.987	1.52	3.65
85	6.539	1.993	2.78
88	6.656	2.029	2.74
100	7.107	2.166	2.56
108	7.393	2.253	2.46
150	8.754	2.668	2.08
174	9.452	2.881	1.93
200	10.158	3.096	1.79
204	10.263	3.128	1.77
300	12.542	3.823	1.45
400	14.581	4.444	1.25
450	15.513	4.728	1.17
460	15.693	4.783	1.16
460	15.693	4.783	1.16
500	16.399	4.998	1.11
512	16.605	5.061	1.10
600	18.06	5.504	1.01
700	19.602	5.975	0.93
800	21.051	6.416	0.87
824	21.386	6.518	0.85
894	22.342	6.81	0.82
960	23.214	7.075	0.78
1000	23.73	7.232	0.77
1218	26.399	8.046	0.69
1250	26.773	8.16	0.68
1500	29.568	9.012	0.62
1700	31.667	9.652	0.58
1794	32.619	9.942	0.56
1800	32.679	9.96	0.56
2000	34.635	10.556	0.53
2100	35.583	10.845	0.51
2200	36.514	11.129	0.50
2300	37.427	11.407	0.49
2500	39.208	11.95	0.46
2700	40.933	12.476	0.44
3000	43.43	13.237	0.42
3400	46.614	14.207	0.39
3600	48.152	14.676	0.38

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3700	48.909	14.907	0.37
3800	49.658	15.135	0.37
3900	50.399	15.361	0.36
4000	51.134	15.585	0.36
4100	51.861	15.807	0.35
4200	52.582	16.026	0.35
4300	53.297	16.244	0.34
4400	54.006	16.46	0.34
4500	54.708	16.674	0.33
4600	55.405	16.887	0.33
4700	56.097	17.097	0.32
4800	56.783	17.307	0.32
4900	57.463	17.514	0.32
5000	58.139	17.72	0.31
6000	64.649	19.704	0.28
8000	76.619	23.352	0.24
8800	81.111	24.722	0.22
10000	87.603	26.7	0.21
12000	97.885	29.834	0.19
14000	107.636	32.806	0.17
15800	116.05	35.37	0.16
16000	116.966	35.65	0.16
18000	125.953	38.389	0.14

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

Agency

UL/ETL Certification
ISO 9001:2015

Classification

CATVP and CATVR
Designed, manufactured and/or distributed under this quality management system

