

ETS036-50T



ETS036-50T, HELIAX® Superflexible High Power, High Temperature Foam Coaxial Cable, corrugated copper, 3.6 mm, blue PVDF jacket

OBSOLETE

Product Classification

Brand	HELIAX® SureFlex®
Product Series	ETS036-50T
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	3.6 mm
Cable Weight	0.25 lb/ft 0.37 kg/m
Diameter Over Dielectric	2.388 mm 0.094 in
Diameter Over Jacket	4.445 mm 0.175 in
Inner Conductor OD	1.0160 mm 0.0400 in
Outer Conductor OD	3.581 mm 0.141 in

Electrical Specifications

Cable Impedance	50 ohm \pm 1.5 ohm
Capacitance	27.3 pF/ft 89.6 pF/m
dc Resistance, Inner Conductor	6.500 ohms/kft 21.327 ohms/km
dc Resistance, Outer Conductor	4.300 ohms/kft 14.108 ohms/km
dc Test Voltage	1500 V
Inductance	0.203 μ H/m 0.062 μ H/ft
Insulation Resistance	100000 Mohms•km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 18000 MHz
Peak Power	3.0 kW
Velocity	81 %

Environmental Specifications

Operating Temperature -40 °C to +150 °C (-40 °F to +302 °F)

Mechanical Specifications

Bending Moment 1.4 N-m | 1.0 ft lb
Flat Plate Crush Strength 30.0 lb/in | 0.5 kg/mm
Minimum Bend Radius, Multiple Bends 19.05 mm | 0.75 in
Minimum Bend Radius, Single Bend 19.05 mm | 0.75 in
Number of Bends, minimum 15
Number of Bends, typical 20

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 200 °C | 392 °F

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.73	0.222	3.00
1	1.033	0.315	3.00
1.5	1.266	0.386	3.00
2	1.463	0.446	3.00
10	3.288	1.002	3.00
20	4.668	1.423	3.00
30	5.734	1.748	2.57
50	7.437	2.267	1.99
85	9.758	2.974	1.51
88	9.933	3.027	1.49
100	10.607	3.233	1.39
108	11.036	3.364	1.34
150	13.075	3.985	1.13
174	14.121	4.304	1.05
200	15.18	4.627	0.97
204	15.337	4.675	0.96
300	18.76	5.718	0.79
400	21.825	6.652	0.68
450	23.228	7.079	0.64
460	23.5	7.162	0.63
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500	24.562	7.486	0.60
512	24.874	7.581	0.59
600	27.066	8.249	0.55
700	29.393	8.959	0.50
800	31.58	9.625	0.47
824	32.088	9.78	0.46
894	33.532	10.22	0.44
960	34.85	10.622	0.42
1000	35.63	10.86	0.41
1218	39.672	12.091	0.37
1250	40.238	12.264	0.37
1500	44.478	13.556	0.33
1700	47.665	14.528	0.31
1794	49.11	14.968	0.30
1800	49.202	14.996	0.30
2000	52.176	15.903	0.28
2100	53.619	16.342	0.28
2200	55.035	16.774	0.27
2300	56.426	17.198	0.26
2500	59.14	18.025	0.25
2700	61.771	18.827	0.24
3000	65.582	19.988	0.23
3400	70.447	21.471	0.21
3600	72.799	22.188	0.20

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3700	73.957	22.541	0.20
3800	75.103	22.89	0.20
3900	76.238	23.236	0.19
4000	77.363	23.579	0.19
4100	78.478	23.919	0.19
4200	79.582	24.256	0.19
4300	80.678	24.589	0.18
4400	81.764	24.92	0.18
4500	82.841	25.249	0.18
4600	83.91	25.575	0.18
4700	84.971	25.898	0.17
4800	86.023	26.219	0.17
4900	87.068	26.537	0.17
5000	88.105	26.853	0.17
6000	98.11	29.902	0.15
8000	116.558	35.525	0.13
8800	123.496	37.64	0.12
10000	133.537	40.7	0.11
12000	149.472	45.557	0.10
14000	164.618	50.173	0.09
15800	177.709	54.163	0.08
16000	179.137	54.598	0.08
18000	193.144	58.868	0.08

* Values typical, guaranteed within 5%

Regulatory Compliance/Certifications

Agency

UL/ETL Certification

Classification

Compliant

