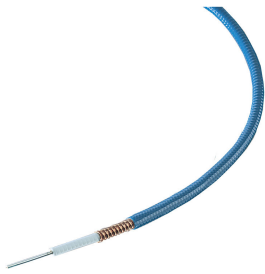


ETS1-50T



ETS1-50T, HELIAX® Superflexible High Power, High Temperature Foam Coaxial Cable, corrugated copper, 1/4 in, blue PVDF jacket

OBSOLETE

This product was discontinued on: September 4, 2019

Product Classification

Product Type	Coaxial wireless cable
Product Brand	HELIAX®
Product Series	ETS1-50T

General Specifications

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

Dimensions

Diameter Over Dielectric	4.826 mm 0.19 in
Diameter Over Jacket	7.366 mm 0.29 in
Inner Conductor OD	1.88 mm 0.074 in
Outer Conductor OD	6.35 mm 0.25 in
Nominal Size	1/4 in

Electrical Specifications

Cable Impedance	50 ohm \pm 2 ohm
Capacitance	81 pF/m 24.689 pF/ft
dc Resistance, Inner Conductor	6.234 ohms/km 1.9 ohms/kft
dc Resistance, Outer Conductor	6.562 ohms/km 2 ohms/kft

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dc Test Voltage	1600 V
Inductance	0.207 μ H/m 0.063 μ H/ft
Insulation Resistance	100000 MOhms-km
Jacket Spark Test Voltage (rms)	4000 V
Operating Frequency Band	1 – 20000 MHz
Peak Power	6.4 kW
Velocity	82 %

Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)
0.5	0.408	0.124	6.4
1.0	0.577	0.176	6.4
1.5	0.707	0.216	6.4
2.0	0.817	0.249	6.4
10.0	1.832	0.558	6.4
20.0	2.597	0.791	6.4
30.0	3.186	0.971	5.52
50.0	4.124	1.257	4.26
85.0	5.397	1.645	3.26
88.0	5.492	1.674	3.2
100.0	5.861	1.786	3
108.0	6.095	1.858	2.89
150.0	7.206	2.196	2.44
174.0	7.773	2.369	2.26
200.0	8.347	2.544	2.11
204.0	8.432	2.57	2.09
300.0	10.277	3.132	1.71
400.0	11.92	3.633	1.48
450.0	12.669	3.861	1.39
460.0	12.814	3.906	1.37
500.0	13.38	4.078	1.31
512.0	13.545	4.128	1.3
600.0	14.709	4.483	1.2
700.0	15.939	4.858	1.1
800.0	17.09	5.209	1.03

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824.0	17.357	5.29	1.01
894.0	18.114	5.521	0.97
960.0	18.804	5.731	0.94
1000.0	19.212	5.856	0.92
1218.0	21.316	6.497	0.83
1250.0	21.611	6.587	0.81
1500.0	23.803	7.255	0.74
1700.0	25.442	7.754	0.69
1794.0	26.183	7.98	0.67
1800.0	26.23	7.994	0.67
2000.0	27.75	8.458	0.63
2100.0	28.486	8.682	0.62
2200.0	29.206	8.902	0.6
2300.0	29.913	9.117	0.59
2500.0	31.287	9.536	0.56
2700.0	32.616	9.941	0.54
3000.0	34.533	10.525	0.51
3400.0	36.967	11.267	0.48
3600.0	38.139	11.624	0.46
3700.0	38.715	11.8	0.45
3800.0	39.285	11.973	0.45
3900.0	39.848	12.145	0.44
4000.0	40.406	12.315	0.44
4100.0	40.958	12.483	0.43
4200.0	41.504	12.65	0.42
4300.0	42.045	12.815	0.42
4400.0	42.581	12.978	0.41
4500.0	43.112	13.14	0.41
4600.0	43.638	13.3	0.4
4700.0	44.16	13.459	0.4
4800.0	44.677	13.617	0.39
4900.0	45.19	13.773	0.39
5000.0	45.698	13.928	0.38
6000.0	50.578	15.415	0.35
8000.0	59.464	18.124	0.3

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8800.0	62.772	19.132	0.28
10000.0	67.529	20.582	0.26
12000.0	75.011	22.862	0.23
14000.0	82.05	25.008	0.21
15800.0	88.084	26.847	0.2
16000.0	88.739	27.046	0.2
18000.0	95.142	28.998	0.18
19000.0	98.251	29.945	0.18
20000.0	101.305	30.876	0.17

Material Specifications

Dielectric Material	Expanded PTFE
Jacket Material	PVDF
Inner Conductor Material	Silver-plated copper wire
Outer Conductor Material	Corrugated copper

Mechanical Specifications

Minimum Bend Radius, multiple Bends	25.4 mm 1 in
Minimum Bend Radius, single Bend	25.4 mm 1 in
Number of Bends, minimum	15
Number of Bends, typical	20
Tensile Strength	68 kg 149.914 lb
Bending Moment	0.8 N-m 7.081 in lb
Flat Plate Crush Strength	1.8 kg/mm 100.795 lb/in

Environmental Specifications

Installation temperature	-40 °C to +60 °C (-40 °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)
Attenuation, Ambient Temperature	68 °F 20 °C
Average Power, Ambient Temperature	104 °F 40 °C
Average Power, Inner Conductor Temperature	392 °F 200 °C
Fire Retardancy Test Method	UL 910/CATVP

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Packaging and Weights

Cable weight

0.1 kg/m | 0.067 lb/ft

Regulatory Compliance/Certifications

Agency

ISO 9001:2015

UL/ETL Certification

Classification

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

CATVP

