



REV	DESCRIPTION	DATE	APP
1	CURVE WAS 30	12/18/2018	DD
0	INITIAL RELEASE	11/19/2018	DD

REVISION HISTORY

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	DRAWN BY: DAN DANKERT	
P/N EPT130T303	SCALE: NONE	LAYER: 0 OF 2
	REV: 1	DATE: 11/19/2018

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RESISTANCE @ +25°C = 30,000 Ω NOMINAL  
 ACCURACY (0 TO +70°C) = ± 1.0°C  
 RESISTANCE/TEMPERATURE CURVE = "30A"  
 BETA "β" (0 TO +50°C) = 3,892°K NOMINAL  
 TEMPERATURE COEFFICIENT @ +25°C = -4.39%/°C NOMINAL  
 DISSIPATION CONSTANT = 1 mW/°C NOMINAL (AIR)  
 THERMAL TIME CONSTANT = 10 SECONDS NOMINAL (AIR)  
 MAXIMUM TEMPERATURE RATING = +150°C

MAXIMUM EXPOSURE TEMPERATURE FOR BEST LONG-TERM DRIFT = +120°C

ROHS COMPLIANT

# El Sensor Technologies

## Resistance Versus Temperature Table

P/N EPT130T303 Revision "1"

Resistance @ +25°C = 30,000 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-55	-67.0	107.4707	3,224,121
-54	-65.2	98.9142	2,967,425
-53	-63.4	91.1154	2,733,461
-52	-61.6	84.0010	2,520,031
-51	-59.8	77.5055	2,325,166
-50	-58.0	71.5700	2,147,100
-49	-56.2	66.1416	1,984,249
-48	-54.4	61.1730	1,835,190
-47	-52.6	56.6214	1,698,643
-46	-50.8	52.4486	1,573,459
-45	-49.0	48.6200	1,458,600
-44	-47.2	45.1038	1,353,114
-43	-45.4	41.8726	1,256,179
-42	-43.6	38.9012	1,167,036
-41	-41.8	36.1665	1,084,996
-40	-40.0	33.6479	1,009,436
-39	-38.2	31.4902	944,707
-38	-36.4	29.4849	884,547
-37	-34.6	27.6194	828,583
-36	-32.8	25.8837	776,510
-35	-31.0	24.2682	728,046
-34	-29.2	22.7633	682,900
-33	-27.4	21.3610	640,830
-32	-25.6	20.0537	601,612
-31	-23.8	18.8348	565,044
-30	-22.0	17.6976	530,928

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-29	-20.2	16.6354	499,063
-28	-18.4	15.6443	469,329
-27	-16.6	14.7176	441,528
-26	-14.8	13.8517	415,551
-25	-13.0	13.0422	391,266
-24	-11.2	12.2846	368,539
-23	-9.4	11.5759	347,278
-22	-7.6	10.9121	327,362
-21	-5.8	10.2904	308,712
-20	-4.0	9.7083	291,248
-19	-2.2	9.1621	274,862
-18	-0.4	8.6501	259,503
-17	1.4	8.1696	245,089
-16	3.2	7.7189	231,567
-15	5.0	7.2957	218,872
-14	6.8	6.8983	206,949
-13	8.6	6.5244	195,733
-12	10.4	6.1736	185,209
-11	12.2	5.8433	175,298
-10	14.0	5.5329	165,986
-9	15.8	5.2407	157,220
-8	17.6	4.9658	148,974
-7	19.4	4.7065	141,194
-6	21.2	4.4627	133,881
-5	23.0	4.2327	126,980
-4	24.8	4.0160	120,480
-3	26.6	3.8113	114,338
-2	28.4	3.6186	108,557
-1	30.2	3.4369	103,108
0	32.0	3.2650	97,950
1	33.8	3.1030	93,091
2	35.6	2.9498	88,495
3	37.4	2.8051	84,152
4	39.2	2.6683	80,049
5	41.0	2.5391	76,172
6	42.8	2.4170	72,509
7	44.6	2.3015	69,045
8	46.4	2.1918	65,755
9	48.2	2.0884	62,651
10	50.0	1.9902	59,707

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
11	51.8	1.8970	56,909
12	53.6	1.8091	54,272
13	55.4	1.7256	51,767
14	57.2	1.6461	49,383
15	59.0	1.5710	47,131
16	60.8	1.5000	45,000
17	62.6	1.4325	42,975
18	64.4	1.3681	41,044
19	66.2	1.3073	39,218
20	68.0	1.2491	37,473
21	69.8	1.1940	35,821
22	71.6	1.1421	34,263
23	73.4	1.0924	32,771
24	75.2	1.0448	31,345
25	77.0	1.0000	30,000
26	78.8	0.95737	28,721
27	80.6	0.91652	27,496
28	82.4	0.87789	26,337
29	84.2	0.84059	25,218
30	86.0	0.80551	24,165
31	87.8	0.77220	23,166
32	89.6	0.74023	22,207
33	91.4	0.70959	21,288
34	93.2	0.68073	20,422
35	95.0	0.65320	19,596
36	96.8	0.62655	18,797
37	98.6	0.60169	18,051
38	100.4	0.57771	17,331
39	102.2	0.55462	16,639
40	104.0	0.53242	15,972
41	105.8	0.51155	15,346
42	107.6	0.49156	14,747
43	109.4	0.47247	14,174
44	111.2	0.45426	13,628
45	113.0	0.43681	13,104
46	114.8	0.42012	12,603
47	116.6	0.40409	12,123
48	118.4	0.38881	11,664
49	120.2	0.37420	11,226
50	122.0	0.36021	10,806

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+ 25°C)	Resistance (Ω Nominal)
51	123.8	0.34680	10,404
52	125.6	0.33401	10,020
53	127.4	0.32171	9,651.4
54	129.2	0.30990	9,297.1
55	131.0	0.29858	8,957.4
56	132.8	0.28779	8,633.7
57	134.6	0.27740	8,321.9
58	136.4	0.26750	8,024.9
59	138.2	0.25790	7,737.1
60	140.0	0.24880	7,464.0
61	141.8	0.24001	7,200.3
62	143.6	0.23162	6,948.5
63	145.4	0.22349	6,704.7
64	147.2	0.21572	6,471.6
65	149.0	0.20830	6,249.1
66	150.8	0.20111	6,033.3
67	152.6	0.19418	5,825.5
68	154.4	0.18761	5,628.3
69	156.2	0.18131	5,439.2
70	158.0	0.17520	5,256.0
71	159.8	0.16932	5,079.5
72	161.6	0.16372	4,911.6
73	163.4	0.15821	4,746.4
74	165.2	0.15302	4,590.6
75	167.0	0.14800	4,440.1
76	168.8	0.14321	4,296.2
77	170.6	0.13850	4,155.0
78	172.4	0.13401	4,020.4
79	174.2	0.12971	3,891.2
80	176.0	0.12549	3,764.7
81	177.8	0.12149	3,644.8
82	179.6	0.11772	3,531.5
83	181.4	0.11399	3,419.6
84	183.2	0.11039	3,311.7
85	185.0	0.10702	3,210.5
86	186.8	0.10369	3,110.6
87	188.6	0.10049	3,014.7
88	190.4	0.097380	2,921.4
89	192.2	0.094405	2,832.1
90	194.0	0.091563	2,746.9

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
91	195.8	0.088766	2,663.0
92	197.6	0.086101	2,583.0
93	199.4	0.083526	2,505.8
94	201.2	0.081039	2,431.2
95	203.0	0.078641	2,359.2
96	204.8	0.076332	2,290.0
97	206.6	0.074112	2,223.4
98	208.4	0.071980	2,159.4
99	210.2	0.069849	2,095.5
100	212.0	0.067851	2,035.5
101	213.8	0.065897	1,976.9
102	215.6	0.064032	1,921.0
103	217.4	0.062211	1,866.3
104	219.2	0.060480	1,814.4
105	221.0	0.058748	1,762.4
106	222.8	0.057105	1,713.1
107	224.6	0.055551	1,666.5
108	226.4	0.053996	1,619.9
109	228.2	0.052487	1,574.6
110	230.0	0.051066	1,532.0
111	231.8	0.049689	1,490.7
112	233.6	0.048313	1,449.4
113	235.4	0.047025	1,410.7
114	237.2	0.045737	1,372.1
115	239.0	0.044538	1,336.1
116	240.8	0.043339	1,300.2
117	242.6	0.042189	1,265.7
118	244.4	0.041079	1,232.4
119	246.2	0.040000	1,200.0
120	248.0	0.038961	1,168.8
121	249.8	0.037940	1,138.2
122	251.6	0.036958	1,108.7
123	253.4	0.036008	1,080.2
124	255.2	0.035089	1,052.7
125	257.0	0.034192	1,025.8
126	258.8	0.033321	999.64
127	260.6	0.032478	974.33
128	262.4	0.031661	949.82
129	264.2	0.030870	926.11
130	266.0	0.030102	903.06

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
131	267.8	0.029352	880.55
132	269.6	0.028628	858.84
133	271.4	0.027922	837.66
134	273.2	0.027238	817.14
135	275.0	0.026581	797.42
136	276.8	0.025928	777.84
137	278.6	0.025311	759.33
138	280.4	0.024698	740.94
139	282.2	0.024112	723.36
140	284.0	0.023530	705.91
141	285.8	0.022971	689.12
142	287.6	0.022429	672.87
143	289.4	0.021901	657.02
144	291.2	0.021390	641.70
145	293.0	0.020888	626.64
146	294.8	0.020409	612.26
147	296.6	0.019938	598.13
148	298.4	0.019480	584.41
149	300.2	0.019032	570.96
150	302.0	0.018610	558.30