



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 EPT130R103	SCALE: NONE	LAYER: 0 OF 2
	REV: 1	DATE: 11/19/2018

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RESISTANCE @ +25°C = 10,000 Ω NOMINAL
 ACCURACY (0 TO +70°C) = ± 0.20°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 EPT130R103 Revision "1"

Resistance @ +25°C = 10,000 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-55	-67.0	107.4707	1,074,707
-54	-65.2	98.9142	989,142
-53	-63.4	91.1154	911,154
-52	-61.6	84.0010	840,010
-51	-59.8	77.5055	775,055
-50	-58.0	71.5700	715,700
-49	-56.2	66.1416	661,416
-48	-54.4	61.1730	611,730
-47	-52.6	56.6214	566,214
-46	-50.8	52.4486	524,486
-45	-49.0	48.6200	486,200
-44	-47.2	45.1038	451,038
-43	-45.4	41.8726	418,726
-42	-43.6	38.9012	389,012
-41	-41.8	36.1665	361,665
-40	-40.0	33.6479	336,479
-39	-38.2	31.4902	314,902
-38	-36.4	29.4849	294,849
-37	-34.6	27.6194	276,194
-36	-32.8	25.8837	258,837
-35	-31.0	24.2682	242,682
-34	-29.2	22.7633	227,633
-33	-27.4	21.3610	213,610
-32	-25.6	20.0537	200,537
-31	-23.8	18.8348	188,348
-30	-22.0	17.6976	176,976

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-29	-20.2	16.6354	166,354
-28	-18.4	15.6443	156,443
-27	-16.6	14.7176	147,176
-26	-14.8	13.8517	138,517
-25	-13.0	13.0422	130,422
-24	-11.2	12.2846	122,846
-23	-9.4	11.5759	115,759
-22	-7.6	10.9121	109,121
-21	-5.8	10.2904	102,904
-20	-4.0	9.7083	97,083
-19	-2.2	9.1621	91,621
-18	-0.4	8.6501	86,501
-17	1.4	8.1696	81,696
-16	3.2	7.7189	77,189
-15	5.0	7.2957	72,957
-14	6.8	6.8983	68,983
-13	8.6	6.5244	65,244
-12	10.4	6.1736	61,736
-11	12.2	5.8433	58,433
-10	14.0	5.5329	55,329
-9	15.8	5.2407	52,407
-8	17.6	4.9658	49,658
-7	19.4	4.7065	47,065
-6	21.2	4.4627	44,627
-5	23.0	4.2327	42,327
-4	24.8	4.0160	40,160
-3	26.6	3.8113	38,113
-2	28.4	3.6186	36,186
-1	30.2	3.4369	34,369
0	32.0	3.2650	32,650
1	33.8	3.1030	31,030
2	35.6	2.9498	29,498
3	37.4	2.8051	28,051
4	39.2	2.6683	26,683
5	41.0	2.5391	25,391
6	42.8	2.4170	24,170
7	44.6	2.3015	23,015
8	46.4	2.1918	21,918
9	48.2	2.0884	20,884
10	50.0	1.9902	19,902

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+ 25°C)	Resistance (Ω Nominal)
11	51.8	1.8970	18,970
12	53.6	1.8091	18,091
13	55.4	1.7256	17,256
14	57.2	1.6461	16,461
15	59.0	1.5710	15,710
16	60.8	1.5000	15,000
17	62.6	1.4325	14,325
18	64.4	1.3681	13,681
19	66.2	1.3073	13,073
20	68.0	1.2491	12,491
21	69.8	1.1940	11,940
22	71.6	1.1421	11,421
23	73.4	1.0924	10,924
24	75.2	1.0448	10,448
25	77.0	1.0000	10,000
26	78.8	0.95737	9,573.7
27	80.6	0.91652	9,165.2
28	82.4	0.87789	8,778.9
29	84.2	0.84059	8,405.9
30	86.0	0.80551	8,055.1
31	87.8	0.77220	7,722.0
32	89.6	0.74023	7,402.3
33	91.4	0.70959	7,095.9
34	93.2	0.68073	6,807.3
35	95.0	0.65320	6,532.0
36	96.8	0.62655	6,265.5
37	98.6	0.60169	6,016.9
38	100.4	0.57771	5,777.1
39	102.2	0.55462	5,546.2
40	104.0	0.53242	5,324.2
41	105.8	0.51155	5,115.5
42	107.6	0.49156	4,915.6
43	109.4	0.47247	4,724.7
44	111.2	0.45426	4,542.6
45	113.0	0.43681	4,368.1
46	114.8	0.42012	4,201.2
47	116.6	0.40409	4,040.9
48	118.4	0.38881	3,888.1
49	120.2	0.37420	3,742.0
50	122.0	0.36021	3,602.1

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+ 25°C)	Resistance (Ω Nominal)
51	123.8	0.34680	3,468.0
52	125.6	0.33401	3,340.1
53	127.4	0.32171	3,217.1
54	129.2	0.30990	3,099.0
55	131.0	0.29858	2,985.8
56	132.8	0.28779	2,877.9
57	134.6	0.27740	2,774.0
58	136.4	0.26750	2,675.0
59	138.2	0.25790	2,579.0
60	140.0	0.24880	2,488.0
61	141.8	0.24001	2,400.1
62	143.6	0.23162	2,316.2
63	145.4	0.22349	2,234.9
64	147.2	0.21572	2,157.2
65	149.0	0.20830	2,083.0
66	150.8	0.20111	2,011.1
67	152.6	0.19418	1,941.8
68	154.4	0.18761	1,876.1
69	156.2	0.18131	1,813.1
70	158.0	0.17520	1,752.0
71	159.8	0.16932	1,693.2
72	161.6	0.16372	1,637.2
73	163.4	0.15821	1,582.1
74	165.2	0.15302	1,530.2
75	167.0	0.14800	1,480.0
76	168.8	0.14321	1,432.1
77	170.6	0.13850	1,385.0
78	172.4	0.13401	1,340.1
79	174.2	0.12971	1,297.1
80	176.0	0.12549	1,254.9
81	177.8	0.12149	1,214.9
82	179.6	0.11772	1,177.2
83	181.4	0.11399	1,139.9
84	183.2	0.11039	1,103.9
85	185.0	0.10702	1,070.2
86	186.8	0.10369	1,036.9
87	188.6	0.10049	1,004.9
88	190.4	0.097380	973.80
89	192.2	0.094405	944.05
90	194.0	0.091563	915.63

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
91	195.8	0.088766	887.66
92	197.6	0.086101	861.01
93	199.4	0.083526	835.26
94	201.2	0.081039	810.39
95	203.0	0.078641	786.41
96	204.8	0.076332	763.32
97	206.6	0.074112	741.12
98	208.4	0.071980	719.80
99	210.2	0.069849	698.49
100	212.0	0.067851	678.51
101	213.8	0.065897	658.97
102	215.6	0.064032	640.32
103	217.4	0.062211	622.11
104	219.2	0.060480	604.80
105	221.0	0.058748	587.48
106	222.8	0.057105	571.05
107	224.6	0.055551	555.51
108	226.4	0.053996	539.96
109	228.2	0.052487	524.87
110	230.0	0.051066	510.66
111	231.8	0.049689	496.89
112	233.6	0.048313	483.13
113	235.4	0.047025	470.25
114	237.2	0.045737	457.37
115	239.0	0.044538	445.38
116	240.8	0.043339	433.39
117	242.6	0.042189	421.89
118	244.4	0.041079	410.79
119	246.2	0.040000	400.00
120	248.0	0.038961	389.61
121	249.8	0.037940	379.40
122	251.6	0.036958	369.58
123	253.4	0.036008	360.08
124	255.2	0.035089	350.89
125	257.0	0.034192	341.92
126	258.8	0.033321	333.21
127	260.6	0.032478	324.78
128	262.4	0.031661	316.61
129	264.2	0.030870	308.70
130	266.0	0.030102	301.02

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
131	267.8	0.029352	293.52
132	269.6	0.028628	286.28
133	271.4	0.027922	279.22
134	273.2	0.027238	272.38
135	275.0	0.026581	265.81
136	276.8	0.025928	259.28
137	278.6	0.025311	253.11
138	280.4	0.024698	246.98
139	282.2	0.024112	241.12
140	284.0	0.023530	235.30
141	285.8	0.022971	229.71
142	287.6	0.022429	224.29
143	289.4	0.021901	219.01
144	291.2	0.021390	213.90
145	293.0	0.020888	208.88
146	294.8	0.020409	204.09
147	296.6	0.019938	199.38
148	298.4	0.019480	194.80
149	300.2	0.019032	190.32
150	302.0	0.018610	186.10