



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

REVISION HISTORY

EI SENSOR TECHNOLOGIES www.ei-sensor.com © COPYRIGHT	NTC THERMISTOR	
	DRAWN BY: DAN DANKERT	
P/N EPT130R222	SCALE: NONE	LAYER: 0 OF 2
	REV: 1	DATE: 11/19/2018

This PROPRIETARY document is the property of EI Sensor Technologies. It is confidential in nature, non-transferrable and issued with the understanding that it is not to be traced or copied without permission, and is returnable on demand.

RESISTANCE @ +25°C = 2,252 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 EPT130R222 Revision "1"

Resistance @ +25°C = 2,252 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-55	-67.0	107.4707	242,024
-54	-65.2	98.9142	222,755
-53	-63.4	91.1154	205,192
-52	-61.6	84.0010	189,170
-51	-59.8	77.5055	174,542
-50	-58.0	71.5700	161,176
-49	-56.2	66.1416	148,951
-48	-54.4	61.1730	137,762
-47	-52.6	56.6214	127,511
-46	-50.8	52.4486	118,114
-45	-49.0	48.6200	109,492
-44	-47.2	45.1038	101,574
-43	-45.4	41.8726	94,297
-42	-43.6	38.9012	87,606
-41	-41.8	36.1665	81,447
-40	-40.0	33.6479	75,775
-39	-38.2	31.4902	70,916
-38	-36.4	29.4849	66,400
-37	-34.6	27.6194	62,199
-36	-32.8	25.8837	58,290
-35	-31.0	24.2682	54,652
-34	-29.2	22.7633	51,263
-33	-27.4	21.3610	48,105
-32	-25.6	20.0537	45,161
-31	-23.8	18.8348	42,416
-30	-22.0	17.6976	39,855

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-29	-20.2	16.6354	37,463
-28	-18.4	15.6443	35,231
-27	-16.6	14.7176	33,144
-26	-14.8	13.8517	31,194
-25	-13.0	13.0422	29,371
-24	-11.2	12.2846	27,665
-23	-9.4	11.5759	26,069
-22	-7.6	10.9121	24,574
-21	-5.8	10.2904	23,174
-20	-4.0	9.7083	21,863
-19	-2.2	9.1621	20,633
-18	-0.4	8.6501	19,480
-17	1.4	8.1696	18,398
-16	3.2	7.7189	17,383
-15	5.0	7.2957	16,430
-14	6.8	6.8983	15,535
-13	8.6	6.5244	14,693
-12	10.4	6.1736	13,903
-11	12.2	5.8433	13,159
-10	14.0	5.5329	12,460
-9	15.8	5.2407	11,802
-8	17.6	4.9658	11,183
-7	19.4	4.7065	10,599
-6	21.2	4.4627	10,050
-5	23.0	4.2327	9,532.0
-4	24.8	4.0160	9,044.0
-3	26.6	3.8113	8,583.0
-2	28.4	3.6186	8,149.0
-1	30.2	3.4369	7,740.0
0	32.0	3.2650	7,352.8
1	33.8	3.1030	6,988.0
2	35.6	2.9498	6,643.0
3	37.4	2.8051	6,317.0
4	39.2	2.6683	6,009.0
5	41.0	2.5391	5,718.0
6	42.8	2.4170	5,443.0
7	44.6	2.3015	5,183.0
8	46.4	2.1918	4,936.0
9	48.2	2.0884	4,703.0
10	50.0	1.9902	4,482.0

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+ 25°C)	Resistance (Ω Nominal)
11	51.8	1.8970	4,272.0
12	53.6	1.8091	4,074.0
13	55.4	1.7256	3,886.0
14	57.2	1.6461	3,707.0
15	59.0	1.5710	3,538.0
16	60.8	1.5000	3,378.0
17	62.6	1.4325	3,226.0
18	64.4	1.3681	3,081.0
19	66.2	1.3073	2,944.0
20	68.0	1.2491	2,813.0
21	69.8	1.1940	2,689.0
22	71.6	1.1421	2,572.0
23	73.4	1.0924	2,460.0
24	75.2	1.0448	2,353.0
25	77.0	1.0000	2,252.0
26	78.8	0.95737	2,156.0
27	80.6	0.91652	2,064.0
28	82.4	0.87789	1,977.0
29	84.2	0.84059	1,893.0
30	86.0	0.80551	1,814.0
31	87.8	0.77220	1,739.0
32	89.6	0.74023	1,667.0
33	91.4	0.70959	1,598.0
34	93.2	0.68073	1,533.0
35	95.0	0.65320	1,471.0
36	96.8	0.62655	1,411.0
37	98.6	0.60169	1,355.0
38	100.4	0.57771	1,301.0
39	102.2	0.55462	1,249.0
40	104.0	0.53242	1,199.0
41	105.8	0.51155	1,152.0
42	107.6	0.49156	1,107.0
43	109.4	0.47247	1,064.0
44	111.2	0.45426	1,023.0
45	113.0	0.43681	983.70
46	114.8	0.42012	946.10
47	116.6	0.40409	910.00
48	118.4	0.38881	875.60
49	120.2	0.37420	842.70
50	122.0	0.36021	811.20

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
51	123.8	0.34680	781.00
52	125.6	0.33401	752.20
53	127.4	0.32171	724.50
54	129.2	0.30990	697.90
55	131.0	0.29858	672.40
56	132.8	0.28779	648.10
57	134.6	0.27740	624.70
58	136.4	0.26750	602.40
59	138.2	0.25790	580.80
60	140.0	0.24880	560.30
61	141.8	0.24001	540.50
62	143.6	0.23162	521.60
63	145.4	0.22349	503.30
64	147.2	0.21572	485.80
65	149.0	0.20830	469.10
66	150.8	0.20111	452.90
67	152.6	0.19418	437.30
68	154.4	0.18761	422.50
69	156.2	0.18131	408.30
70	158.0	0.17520	394.55
71	159.8	0.16932	381.30
72	161.6	0.16372	368.70
73	163.4	0.15821	356.30
74	165.2	0.15302	344.60
75	167.0	0.14800	333.30
76	168.8	0.14321	322.50
77	170.6	0.13850	311.90
78	172.4	0.13401	301.80
79	174.2	0.12971	292.10
80	176.0	0.12549	282.60
81	177.8	0.12149	273.60
82	179.6	0.11772	265.10
83	181.4	0.11399	256.70
84	183.2	0.11039	248.60
85	185.0	0.10702	241.00
86	186.8	0.10369	233.50
87	188.6	0.10049	226.30
88	190.4	0.097380	219.30
89	192.2	0.094405	212.60
90	194.0	0.091563	206.20

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
91	195.8	0.088766	199.90
92	197.6	0.086101	193.90
93	199.4	0.083526	188.10
94	201.2	0.081039	182.50
95	203.0	0.078641	177.10
96	204.8	0.076332	171.90
97	206.6	0.074112	166.90
98	208.4	0.071980	162.10
99	210.2	0.069849	157.30
100	212.0	0.067851	152.80
101	213.8	0.065897	148.40
102	215.6	0.064032	144.20
103	217.4	0.062211	140.10
104	219.2	0.060480	136.20
105	221.0	0.058748	132.30
106	222.8	0.057105	128.60
107	224.6	0.055551	125.10
108	226.4	0.053996	121.60
109	228.2	0.052487	118.20
110	230.0	0.051066	115.00
111	231.8	0.049689	111.90
112	233.6	0.048313	108.80
113	235.4	0.047025	105.90
114	237.2	0.045737	103.00
115	239.0	0.044538	100.30
116	240.8	0.043339	97.600
117	242.6	0.042189	95.010
118	244.4	0.041079	92.510
119	246.2	0.040000	90.080
120	248.0	0.038961	87.740
121	249.8	0.037940	85.440
122	251.6	0.036958	83.230
123	253.4	0.036008	81.090
124	255.2	0.035089	79.020
125	257.0	0.034192	77.000
126	258.8	0.033321	75.040
127	260.6	0.032478	73.140
128	262.4	0.031661	71.300
129	264.2	0.030870	69.520
130	266.0	0.030102	67.790

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
131	267.8	0.029352	66.100
132	269.6	0.028628	64.470
133	271.4	0.027922	62.880
134	273.2	0.027238	61.340
135	275.0	0.026581	59.860
136	276.8	0.025928	58.390
137	278.6	0.025311	57.000
138	280.4	0.024698	55.620
139	282.2	0.024112	54.300
140	284.0	0.023530	52.990
141	285.8	0.022971	51.730
142	287.6	0.022429	50.510
143	289.4	0.021901	49.320
144	291.2	0.021390	48.170
145	293.0	0.020888	47.040
146	294.8	0.020409	45.960
147	296.6	0.019938	44.900
148	298.4	0.019480	43.870
149	300.2	0.019032	42.860
150	302.0	0.018610	41.910