



REV	DESCRIPTION	DATE	APP
0	INITIAL RELEASE	12/11/2018	DD
REVISION HISTORY			

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	DRAWN BY: DAN DANKERT	
P/N EGR4230J103	SCALE: NONE	LAYER: 0 OF 2
	REV: 0	DATE: 12/11/2018

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RESISTANCE @ +25°C = 10,000 Ω ± 5%  
 RESISTANCE/TEMPERATURE CURVE = "30"  
 BETA "β" (0 TO +50°C) = 3,892°K NOMINAL  
 BETA "β" (+25 TO +85°C) = 3,977°K NOMINAL  
 TEMPERATURE COEFFICIENT @ +25°C = -4.39%/°C NOMINAL  
 DISSIPATION CONSTANT = 0.45 mW/°C NOMINAL (AIR)  
 THERMAL TIME CONSTANT = 2.3 SECONDS NOMINAL (AIR)  
 TEMPERATURE RATING = -50 TO +260°C

ROHS COMPLIANT

# El Sensor Technologies

## Resistance Versus Temperature Table

P/N EGR4230J103 Revision "0"

Resistance @ +25°C = 10,000 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-50	-58.0	66.7790	667,790
-49	-56.2	62.2034	622,034
-48	-54.4	57.9704	579,704
-47	-52.6	54.0522	540,522
-46	-50.8	50.4235	504,235
-45	-49.0	47.0614	470,614
-44	-47.2	43.9446	439,446
-43	-45.4	41.0538	410,538
-42	-43.6	38.3713	383,713
-41	-41.8	35.8808	358,808
-40	-40.0	33.5676	335,676
-39	-38.2	31.4180	314,180
-38	-36.4	29.4194	294,194
-37	-34.6	27.5603	275,603
-36	-32.8	25.8303	258,303
-35	-31.0	24.2196	242,196
-34	-29.2	22.7193	227,193
-33	-27.4	21.3212	213,212
-32	-25.6	20.0177	200,177
-31	-23.8	18.8020	188,020
-30	-22.0	17.6675	176,675
-29	-20.2	16.6084	166,084
-28	-18.4	15.6193	156,193
-27	-16.6	14.6952	146,952
-26	-14.8	13.8314	138,314
-25	-13.0	13.0235	130,235

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-24	-11.2	12.2678	122,678
-23	-9.4	11.5605	115,605
-22	-7.6	10.8983	108,983
-21	-5.8	10.2780	102,780
-20	-4.0	9.6967	96,967
-19	-2.2	9.1518	91,518
-18	-0.4	8.6408	86,408
-17	1.4	8.1614	81,614
-16	3.2	7.7115	77,115
-15	5.0	7.2890	72,890
-14	6.8	6.8922	68,922
-13	8.6	6.5194	65,194
-12	10.4	6.1689	61,689
-11	12.2	5.8394	58,394
-10	14.0	5.5294	55,294
-9	15.8	5.2377	52,377
-8	17.6	4.9631	49,631
-7	19.4	4.7045	47,045
-6	21.2	4.4609	44,609
-5	23.0	4.2313	42,313
-4	24.8	4.0149	40,149
-3	26.6	3.8108	38,108
-2	28.4	3.6183	36,183
-1	30.2	3.4366	34,366
0	32.0	3.2651	32,651
1	33.8	3.1031	31,031
2	35.6	2.9501	29,501
3	37.4	2.8055	28,055
4	39.2	2.6688	26,688
5	41.0	2.5396	25,396
6	42.8	2.4173	24,173
7	44.6	2.3017	23,017
8	46.4	2.1922	21,922
9	48.2	2.0885	20,885
10	50.0	1.9904	19,904
11	51.8	1.8974	18,974
12	53.6	1.8093	18,093
13	55.4	1.7257	17,257
14	57.2	1.6465	16,465
15	59.0	1.5714	15,714

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
16	60.8	1.5001	15,001
17	62.6	1.4325	14,325
18	64.4	1.3683	13,683
19	66.2	1.3073	13,073
20	68.0	1.2494	12,494
21	69.8	1.1943	11,943
22	71.6	1.1420	11,420
23	73.4	1.0923	10,923
24	75.2	1.0450	10,450
25	77.0	1.0000	10,000
26	78.8	0.95720	9,572.0
27	80.6	0.91647	9,164.7
28	82.4	0.87769	8,776.9
29	84.2	0.84077	8,407.7
30	86.0	0.80560	8,056.0
31	87.8	0.77209	7,720.9
32	89.6	0.74016	7,401.6
33	91.4	0.70972	7,097.2
34	93.2	0.68069	6,806.9
35	95.0	0.65302	6,530.2
36	96.8	0.62661	6,266.1
37	98.6	0.60141	6,014.1
38	100.4	0.57737	5,773.7
39	102.2	0.55441	5,544.1
40	104.0	0.53249	5,324.9
41	105.8	0.51155	5,115.5
42	107.6	0.49155	4,915.5
43	109.4	0.47243	4,724.3
44	111.2	0.45416	4,541.6
45	113.0	0.43669	4,366.9
46	114.8	0.41999	4,199.9
47	116.6	0.40401	4,040.1
48	118.4	0.38873	3,887.3
49	120.2	0.37410	3,741.0
50	122.0	0.36010	3,601.0
51	123.8	0.34670	3,467.0
52	125.6	0.33386	3,338.6
53	127.4	0.32157	3,215.7
54	129.2	0.30979	3,097.9
55	131.0	0.29851	2,985.1

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
56	132.8	0.28770	2,877.0
57	134.6	0.27733	2,773.3
58	136.4	0.26739	2,673.9
59	138.2	0.25786	2,578.6
60	140.0	0.24871	2,487.1
61	141.8	0.23994	2,399.4
62	143.6	0.23152	2,315.2
63	145.4	0.22344	2,234.4
64	147.2	0.21568	2,156.8
65	149.0	0.20823	2,082.3
66	150.8	0.20108	2,010.8
67	152.6	0.19421	1,942.1
68	154.4	0.18761	1,876.1
69	156.2	0.18126	1,812.6
70	158.0	0.17516	1,751.6
71	159.8	0.16930	1,693.0
72	161.6	0.16366	1,636.6
73	163.4	0.15824	1,582.4
74	165.2	0.15303	1,530.3
75	167.0	0.14801	1,480.1
76	168.8	0.14320	1,432.0
77	170.6	0.13856	1,385.6
78	172.4	0.13410	1,341.0
79	174.2	0.12980	1,298.0
80	176.0	0.12566	1,256.6
81	177.8	0.12167	1,216.7
82	179.6	0.11783	1,178.3
83	181.4	0.11412	1,141.2
84	183.2	0.11055	1,105.5
85	185.0	0.10711	1,071.1
86	186.8	0.10379	1,037.9
87	188.6	0.10059	1,005.9
88	190.4	0.097500	975.00
89	192.2	0.094522	945.22
90	194.0	0.091648	916.48
91	195.8	0.088876	888.76
92	197.6	0.086200	862.00
93	199.4	0.083618	836.18
94	201.2	0.081125	811.25
95	203.0	0.078718	787.18

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
96	204.8	0.076394	763.94
97	206.6	0.074150	741.50
98	208.4	0.071982	719.82
99	210.2	0.069888	698.88
100	212.0	0.067865	678.65
101	213.8	0.065910	659.10
102	215.6	0.064021	640.21
103	217.4	0.062194	621.94
104	219.2	0.060429	604.29
105	221.0	0.058722	587.22
106	222.8	0.057071	570.71
107	224.6	0.055475	554.75
108	226.4	0.053931	539.31
109	228.2	0.052438	524.38
110	230.0	0.050992	509.92
111	231.8	0.049594	495.94
112	233.6	0.048241	482.41
113	235.4	0.046931	469.31
114	237.2	0.045662	456.62
115	239.0	0.044435	444.35
116	240.8	0.043246	432.46
117	242.6	0.042094	420.94
118	244.4	0.040979	409.79
119	246.2	0.039899	398.99
120	248.0	0.038852	388.52
121	249.8	0.037838	378.38
122	251.6	0.036855	368.55
123	253.4	0.035902	359.02
124	255.2	0.034978	349.78
125	257.0	0.034083	340.83
126	258.8	0.033215	332.15
127	260.6	0.032373	323.73
128	262.4	0.031556	315.56
129	264.2	0.030764	307.64
130	266.0	0.029996	299.96
131	267.8	0.029250	292.50
132	269.6	0.028527	285.27
133	271.4	0.027824	278.24
134	273.2	0.027143	271.43
135	275.0	0.026481	264.81

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
136	276.8	0.025839	258.39
137	278.6	0.025215	252.15
138	280.4	0.024610	246.10
139	282.2	0.024021	240.21
140	284.0	0.023450	234.50
141	285.8	0.022895	228.95
142	287.6	0.022355	223.55
143	289.4	0.021831	218.31
144	291.2	0.021322	213.22
145	293.0	0.020827	208.27
146	294.8	0.020345	203.45
147	296.6	0.019878	198.78
148	298.4	0.019423	194.23
149	300.2	0.018980	189.80
150	302.0	0.018550	185.50
151	303.8	0.018119	181.19
152	305.6	0.017701	177.01
153	307.4	0.017294	172.94
154	309.2	0.016899	168.99
155	311.0	0.016515	165.15
156	312.8	0.016141	161.41
157	314.6	0.015778	157.78
158	316.4	0.015425	154.25
159	318.2	0.015081	150.81
160	320.0	0.014747	147.47
161	321.8	0.014421	144.21
162	323.6	0.014105	141.05
163	325.4	0.013796	137.96
164	327.2	0.013496	134.96
165	329.0	0.013204	132.04
166	330.8	0.012920	129.20
167	332.6	0.012643	126.43
168	334.4	0.012373	123.73
169	336.2	0.012111	121.11
170	338.0	0.011855	118.55
171	339.8	0.011606	116.06
172	341.6	0.011363	113.63
173	343.4	0.011126	111.26
174	345.2	0.010895	108.95
175	347.0	0.010670	106.70

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
176	348.8	0.010451	104.51
177	350.6	0.010237	102.37
178	352.4	0.010028	100.28
179	354.2	0.009825	98.249
180	356.0	0.009627	96.265
181	357.8	0.009433	94.330
182	359.6	0.009244	92.442
183	361.4	0.009060	90.600
184	363.2	0.008880	88.803
185	365.0	0.008705	87.049
186	366.8	0.008534	85.336
187	368.6	0.008367	83.665
188	370.4	0.008203	82.033
189	372.2	0.008044	80.440
190	374.0	0.007889	78.885
191	375.8	0.007737	77.366
192	377.6	0.007588	75.882
193	379.4	0.007443	74.433
194	381.2	0.007302	73.018
195	383.0	0.007164	71.635
196	384.8	0.007028	70.284
197	386.6	0.006896	68.964
198	388.4	0.006767	67.673
199	390.2	0.006641	66.412
200	392.0	0.006518	65.180
201	393.8	0.006398	63.975
202	395.6	0.006280	62.798
203	397.4	0.006165	61.646
204	399.2	0.006052	60.520
205	401.0	0.005942	59.419
206	402.8	0.005834	58.342
207	404.6	0.005729	57.289
208	406.4	0.005626	56.259
209	408.2	0.005525	55.252
210	410.0	0.005427	54.266
211	411.8	0.005330	53.302
212	413.6	0.005236	52.358
213	415.4	0.005143	51.434
214	417.2	0.005053	50.531
215	419.0	0.004965	49.646



Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
216	420.8	0.004878	48.780
217	422.6	0.004793	47.933
218	424.4	0.004710	47.103
219	426.2	0.004629	46.291
220	428.0	0.004550	45.496
221	429.8	0.004472	44.717
222	431.6	0.004396	43.955
223	433.4	0.004321	43.208
224	435.2	0.004248	42.476
225	437.0	0.004176	41.760
226	438.8	0.004106	41.058
227	440.6	0.004037	40.371
228	442.4	0.003970	39.698
229	444.2	0.003904	39.039
230	446.0	0.003839	38.393
231	447.8	0.003776	37.761
232	449.6	0.003714	37.142
233	451.4	0.003654	36.535
234	453.2	0.003594	35.940
235	455.0	0.003536	35.357
236	456.8	0.003479	34.787
237	458.6	0.003423	34.227
238	460.4	0.003368	33.679
239	462.2	0.003314	33.141
240	464.0	0.003262	32.615
241	465.8	0.003210	32.098
242	467.6	0.003159	31.592
243	469.4	0.003110	31.096
244	471.2	0.003061	30.609
245	473.0	0.003013	30.132
246	474.8	0.002966	29.664
247	476.6	0.002921	29.205
248	478.4	0.002876	28.755
249	480.2	0.002831	28.313
250	482.0	0.002788	27.880
251	483.8	0.002746	27.455
252	485.6	0.002704	27.038
253	487.4	0.002663	26.629
254	489.2	0.002623	26.228
255	491.0	0.002583	25.834

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
256	492.8	0.002545	25.448
257	494.6	0.002507	25.069
258	496.4	0.002470	24.697
259	498.2	0.002433	24.331
260	500.0	0.002397	23.973