



REV	DESCRIPTION	DATE	APP
0	INITIAL RELEASE	11/19/2018	DD
REVISION HISTORY			

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	DRAWN BY: DAN DANKERT	
P/N ED3530J203-	SCALE: NONE	LAYER: 0 OF 2
	REV: 0	DATE: 11/19/2018

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RESISTANCE @ +25°C = 20,000 Ω ± 5%  
 RESISTANCE/TEMPERATURE CURVE = "30"  
 BETA "β" (0 TO +50°C) = 3,892°K NOMINAL  
 TEMPERATURE COEFFICIENT @ +25°C = -4.39%/°C NOMINAL  
 DISSIPATION CONSTANT = 2 mW/°C NOMINAL (AIR)  
 THERMAL TIME CONSTANT = 10 SECONDS NOMINAL (AIR)  
 MAXIMUM TEMPERATURE RATING = +300°C

ROHS COMPLIANT

PACKAGING: SEE TABLE

PART NUMBER	PACKAGING
ED3530J203-B	BULK
ED3530J203-T	TAPE & REEL PER IEC 60286-1

# El Sensor Technologies

## Resistance Versus Temperature Table

P/N ED3530J203 Revision "0"

Resistance @ +25°C = 20,000 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-55	-67.0	95.9640	1,919,280
-54	-65.2	89.1579	1,783,158
-53	-63.4	82.8783	1,657,566
-52	-61.6	77.0814	1,541,628
-51	-59.8	71.7271	1,434,542
-50	-58.0	66.7790	1,335,580
-49	-56.2	62.2034	1,244,068
-48	-54.4	57.9704	1,159,408
-47	-52.6	54.0522	1,081,044
-46	-50.8	50.4235	1,008,470
-45	-49.0	47.0614	941,228
-44	-47.2	43.9446	878,892
-43	-45.4	41.0538	821,076
-42	-43.6	38.3713	767,426
-41	-41.8	35.8808	717,616
-40	-40.0	33.5676	671,352
-39	-38.2	31.4180	628,360
-38	-36.4	29.4194	588,388
-37	-34.6	27.5603	551,206
-36	-32.8	25.8303	516,606
-35	-31.0	24.2196	484,392
-34	-29.2	22.7193	454,386
-33	-27.4	21.3212	426,424
-32	-25.6	20.0177	400,354
-31	-23.8	18.8020	376,040
-30	-22.0	17.6675	353,350

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-29	-20.2	16.6084	332,168
-28	-18.4	15.6193	312,386
-27	-16.6	14.6952	293,904
-26	-14.8	13.8314	276,628
-25	-13.0	13.0235	260,470
-24	-11.2	12.2678	245,356
-23	-9.4	11.5605	231,210
-22	-7.6	10.8983	217,966
-21	-5.8	10.2780	205,560
-20	-4.0	9.6967	193,934
-19	-2.2	9.1518	183,036
-18	-0.4	8.6408	172,816
-17	1.4	8.1614	163,228
-16	3.2	7.7115	154,230
-15	5.0	7.2890	145,780
-14	6.8	6.8922	137,844
-13	8.6	6.5194	130,388
-12	10.4	6.1689	123,378
-11	12.2	5.8394	116,788
-10	14.0	5.5294	110,588
-9	15.8	5.2377	104,754
-8	17.6	4.9631	99,262
-7	19.4	4.7045	94,090
-6	21.2	4.4609	89,218
-5	23.0	4.2313	84,626
-4	24.8	4.0149	80,298
-3	26.6	3.8108	76,216
-2	28.4	3.6183	72,366
-1	30.2	3.4366	68,732
0	32.0	3.2651	65,302
1	33.8	3.1031	62,062
2	35.6	2.9501	59,002
3	37.4	2.8055	56,110
4	39.2	2.6688	53,376
5	41.0	2.5396	50,791
6	42.8	2.4173	48,346
7	44.6	2.3017	46,033
8	46.4	2.1922	43,844
9	48.2	2.0885	41,771
10	50.0	1.9904	39,808

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
11	51.8	1.8974	37,948
12	53.6	1.8093	36,185
13	55.4	1.7257	34,515
14	57.2	1.6465	32,931
15	59.0	1.5714	31,428
16	60.8	1.5001	30,002
17	62.6	1.4325	28,650
18	64.4	1.3683	27,365
19	66.2	1.3073	26,145
20	68.0	1.2494	24,987
21	69.8	1.1943	23,886
22	71.6	1.1420	22,840
23	73.4	1.0923	21,845
24	75.2	1.0450	20,900
25	77.0	1.0000	20,000
26	78.8	0.95720	19,144.0
27	80.6	0.91647	18,329.4
28	82.4	0.87769	17,553.8
29	84.2	0.84077	16,815.4
30	86.0	0.80560	16,112.0
31	87.8	0.77209	15,441.8
32	89.6	0.74016	14,803.2
33	91.4	0.70972	14,194.4
34	93.2	0.68069	13,613.8
35	95.0	0.65302	13,060.4
36	96.8	0.62661	12,532.2
37	98.6	0.60141	12,028.2
38	100.4	0.57737	11,547.4
39	102.2	0.55441	11,088.2
40	104.0	0.53249	10,649.8
41	105.8	0.51155	10,231.0
42	107.6	0.49155	9,831.0
43	109.4	0.47243	9,448.6
44	111.2	0.45416	9,083.2
45	113.0	0.43669	8,733.8
46	114.8	0.41999	8,399.8
47	116.6	0.40401	8,080.2
48	118.4	0.38873	7,774.6
49	120.2	0.37410	7,482.0
50	122.0	0.36010	7,202.0

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
51	123.8	0.34670	6,934.0
52	125.6	0.33386	6,677.2
53	127.4	0.32157	6,431.4
54	129.2	0.30979	6,195.8
55	131.0	0.29851	5,970.2
56	132.8	0.28770	5,754.0
57	134.6	0.27733	5,546.6
58	136.4	0.26739	5,347.8
59	138.2	0.25786	5,157.2
60	140.0	0.24871	4,974.2
61	141.8	0.23994	4,798.8
62	143.6	0.23152	4,630.4
63	145.4	0.22344	4,468.8
64	147.2	0.21568	4,313.6
65	149.0	0.20823	4,164.6
66	150.8	0.20108	4,021.6
67	152.6	0.19421	3,884.2
68	154.4	0.18761	3,752.2
69	156.2	0.18126	3,625.2
70	158.0	0.17516	3,503.2
71	159.8	0.16930	3,386.0
72	161.6	0.16366	3,273.2
73	163.4	0.15824	3,164.8
74	165.2	0.15303	3,060.6
75	167.0	0.14801	2,960.2
76	168.8	0.14320	2,864.0
77	170.6	0.13856	2,771.3
78	172.4	0.13410	2,682.0
79	174.2	0.12980	2,596.1
80	176.0	0.12566	2,513.3
81	177.8	0.12167	2,433.5
82	179.6	0.11783	2,356.6
83	181.4	0.11412	2,282.5
84	183.2	0.11055	2,211.0
85	185.0	0.10711	2,142.2
86	186.8	0.10379	2,075.8
87	188.6	0.10059	2,011.8
88	190.4	0.097500	1,950.0
89	192.2	0.094522	1,890.4
90	194.0	0.091648	1,833.0

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
91	195.8	0.088876	1,777.5
92	197.6	0.086200	1,724.0
93	199.4	0.083618	1,672.4
94	201.2	0.081125	1,622.5
95	203.0	0.078718	1,574.4
96	204.8	0.076394	1,527.9
97	206.6	0.074150	1,483.0
98	208.4	0.071982	1,439.6
99	210.2	0.069888	1,397.8
100	212.0	0.067865	1,357.3
101	213.8	0.065910	1,318.2
102	215.6	0.064021	1,280.4
103	217.4	0.062194	1,243.9
104	219.2	0.060429	1,208.6
105	221.0	0.058722	1,174.4
106	222.8	0.057071	1,141.4
107	224.6	0.055475	1,109.5
108	226.4	0.053931	1,078.6
109	228.2	0.052438	1,048.8
110	230.0	0.050992	1,019.8
111	231.8	0.049594	991.88
112	233.6	0.048241	964.82
113	235.4	0.046931	938.62
114	237.2	0.045662	913.24
115	239.0	0.044435	888.70
116	240.8	0.043246	864.92
117	242.6	0.042094	841.88
118	244.4	0.040979	819.58
119	246.2	0.039899	797.98
120	248.0	0.038852	777.04
121	249.8	0.037838	756.76
122	251.6	0.036855	737.10
123	253.4	0.035902	718.04
124	255.2	0.034978	699.56
125	257.0	0.034083	681.66
126	258.8	0.033215	664.30
127	260.6	0.032373	647.46
128	262.4	0.031556	631.12
129	264.2	0.030764	615.28
130	266.0	0.029996	599.92

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
131	267.8	0.029250	585.00
132	269.6	0.028527	570.54
133	271.4	0.027824	556.48
134	273.2	0.027143	542.86
135	275.0	0.026481	529.62
136	276.8	0.025839	516.78
137	278.6	0.025215	504.30
138	280.4	0.024610	492.20
139	282.2	0.024021	480.42
140	284.0	0.023450	469.00
141	285.8	0.022895	457.90
142	287.6	0.022355	447.10
143	289.4	0.021831	436.62
144	291.2	0.021322	426.44
145	293.0	0.020827	416.54
146	294.8	0.020345	406.90
147	296.6	0.019878	397.56
148	298.4	0.019423	388.46
149	300.2	0.018980	379.60
150	302.0	0.018550	371.00
151	303.8	0.018119	362.39
152	305.6	0.017701	354.02
153	307.4	0.017294	345.89
154	309.2	0.016899	337.98
155	311.0	0.016515	330.30
156	312.8	0.016141	322.82
157	314.6	0.015778	315.56
158	316.4	0.015425	308.49
159	318.2	0.015081	301.62
160	320.0	0.014747	294.93
161	321.8	0.014421	288.42
162	323.6	0.014105	282.09
163	325.4	0.013796	275.93
164	327.2	0.013496	269.93
165	329.0	0.013204	264.09
166	330.8	0.012920	258.40
167	332.6	0.012643	252.86
168	334.4	0.012373	247.47
169	336.2	0.012111	242.21
170	338.0	0.011855	237.10

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
171	339.8	0.011606	232.11
172	341.6	0.011363	227.25
173	343.4	0.011126	222.52
174	345.2	0.010895	217.90
175	347.0	0.010670	213.40
176	348.8	0.010451	209.01
177	350.6	0.010237	204.74
178	352.4	0.010028	200.57
179	354.2	0.009825	196.50
180	356.0	0.009627	192.53
181	357.8	0.009433	188.66
182	359.6	0.009244	184.88
183	361.4	0.009060	181.20
184	363.2	0.008880	177.61
185	365.0	0.008705	174.10
186	366.8	0.008534	170.67
187	368.6	0.008367	167.33
188	370.4	0.008203	164.07
189	372.2	0.008044	160.88
190	374.0	0.007889	157.77
191	375.8	0.007737	154.73
192	377.6	0.007588	151.76
193	379.4	0.007443	148.87
194	381.2	0.007302	146.04
195	383.0	0.007164	143.27
196	384.8	0.007028	140.57
197	386.6	0.006896	137.93
198	388.4	0.006767	135.35
199	390.2	0.006641	132.82
200	392.0	0.006518	130.36
201	393.8	0.006398	127.95
202	395.6	0.006280	125.60
203	397.4	0.006165	123.29
204	399.2	0.006052	121.04
205	401.0	0.005942	118.84
206	402.8	0.005834	116.68
207	404.6	0.005729	114.58
208	406.4	0.005626	112.52
209	408.2	0.005525	110.50
210	410.0	0.005427	108.53



Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
211	411.8	0.005330	106.60
212	413.6	0.005236	104.72
213	415.4	0.005143	102.87
214	417.2	0.005053	101.06
215	419.0	0.004965	99.292
216	420.8	0.004878	97.560
217	422.6	0.004793	95.866
218	424.4	0.004710	94.206
219	426.2	0.004629	92.582
220	428.0	0.004550	90.992
221	429.8	0.004472	89.434
222	431.6	0.004396	87.910
223	433.4	0.004321	86.416
224	435.2	0.004248	84.952
225	437.0	0.004176	83.520
226	438.8	0.004106	82.116
227	440.6	0.004037	80.742
228	442.4	0.003970	79.396
229	444.2	0.003904	78.078
230	446.0	0.003839	76.786
231	447.8	0.003776	75.522
232	449.6	0.003714	74.284
233	451.4	0.003654	73.070
234	453.2	0.003594	71.880
235	455.0	0.003536	70.714
236	456.8	0.003479	69.574
237	458.6	0.003423	68.454
238	460.4	0.003368	67.358
239	462.2	0.003314	66.282
240	464.0	0.003262	65.230
241	465.8	0.003210	64.196
242	467.6	0.003159	63.184
243	469.4	0.003110	62.192
244	471.2	0.003061	61.218
245	473.0	0.003013	60.264
246	474.8	0.002966	59.328
247	476.6	0.002921	58.410
248	478.4	0.002876	57.510
249	480.2	0.002831	56.626
250	482.0	0.002788	55.760

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
251	483.8	0.002746	54.910
252	485.6	0.002704	54.076
253	487.4	0.002663	53.258
254	489.2	0.002623	52.456
255	491.0	0.002583	51.668
256	492.8	0.002545	50.896
257	494.6	0.002507	50.138
258	496.4	0.002470	49.394
259	498.2	0.002433	48.662
260	500.0	0.002397	47.946
261	501.8	0.002362	47.242
262	503.6	0.002328	46.550
263	505.4	0.002294	45.872
264	507.2	0.002260	45.206
265	509.0	0.002228	44.552
266	510.8	0.002196	43.910
267	512.6	0.002164	43.278
268	514.4	0.002133	42.660
269	516.2	0.002103	42.050
270	518.0	0.002073	41.454
271	519.8	0.002043	40.866
272	521.6	0.002015	40.290
273	523.4	0.001986	39.724
274	525.2	0.001958	39.166
275	527.0	0.001931	38.620
276	528.8	0.001904	38.082
277	530.6	0.001878	37.554
278	532.4	0.001852	37.036
279	534.2	0.001826	36.526
280	536.0	0.001801	36.026
281	537.8	0.001777	35.532
282	539.6	0.001752	35.048
283	541.4	0.001729	34.574
284	543.2	0.001705	34.106
285	545.0	0.001682	33.646
286	546.8	0.001660	33.194
287	548.6	0.001638	32.750
288	550.4	0.001616	32.312
289	552.2	0.001594	31.882
290	554.0	0.001573	31.460

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
291	555.8	0.001552	31.046
292	557.6	0.001532	30.636
293	559.4	0.001512	30.234
294	561.2	0.001492	29.840
295	563.0	0.001473	29.450
296	564.8	0.001453	29.068
297	566.6	0.001435	28.692
298	568.4	0.001416	28.322
299	570.2	0.001398	27.958
300	572.0	0.001380	27.600