



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

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	DRAWN BY: DAN DANKERT	
P/N ED3530F104-	SCALE: NONE	LAYER: 0 OF 2
	REV: 0	DATE: 11/19/2018

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RESISTANCE @ +25°C = 100,000 Ω ± 1%
 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
ED3530F104-B	BULK
ED3530F104-T	TAPE & REEL PER IEC 60286-1

El Sensor Technologies

Resistance Versus Temperature Table

P/N ED3530F104 Revision "0"

Resistance @ +25°C = 100,000 Ω

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
-55	-67.0	95.9640	9,596,400
-54	-65.2	89.1579	8,915,790
-53	-63.4	82.8783	8,287,830
-52	-61.6	77.0814	7,708,140
-51	-59.8	71.7271	7,172,710
-50	-58.0	66.7790	6,677,900
-49	-56.2	62.2034	6,220,340
-48	-54.4	57.9704	5,797,040
-47	-52.6	54.0522	5,405,220
-46	-50.8	50.4235	5,042,350
-45	-49.0	47.0614	4,706,140
-44	-47.2	43.9446	4,394,460
-43	-45.4	41.0538	4,105,380
-42	-43.6	38.3713	3,837,130
-41	-41.8	35.8808	3,588,080
-40	-40.0	33.5676	3,356,760
-39	-38.2	31.4180	3,141,800
-38	-36.4	29.4194	2,941,940
-37	-34.6	27.5603	2,756,030
-36	-32.8	25.8303	2,583,030
-35	-31.0	24.2196	2,421,960
-34	-29.2	22.7193	2,271,930
-33	-27.4	21.3212	2,132,120
-32	-25.6	20.0177	2,001,770
-31	-23.8	18.8020	1,880,200
-30	-22.0	17.6675	1,766,750

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
-29	-20.2	16.6084	1,660,840
-28	-18.4	15.6193	1,561,930
-27	-16.6	14.6952	1,469,520
-26	-14.8	13.8314	1,383,140
-25	-13.0	13.0235	1,302,350
-24	-11.2	12.2678	1,226,780
-23	-9.4	11.5605	1,156,050
-22	-7.6	10.8983	1,089,830
-21	-5.8	10.2780	1,027,800
-20	-4.0	9.6967	969,670
-19	-2.2	9.1518	915,180
-18	-0.4	8.6408	864,080
-17	1.4	8.1614	816,140
-16	3.2	7.7115	771,150
-15	5.0	7.2890	728,900
-14	6.8	6.8922	689,220
-13	8.6	6.5194	651,940
-12	10.4	6.1689	616,890
-11	12.2	5.8394	583,940
-10	14.0	5.5294	552,940
-9	15.8	5.2377	523,770
-8	17.6	4.9631	496,310
-7	19.4	4.7045	470,450
-6	21.2	4.4609	446,090
-5	23.0	4.2313	423,130
-4	24.8	4.0149	401,490
-3	26.6	3.8108	381,080
-2	28.4	3.6183	361,830
-1	30.2	3.4366	343,660
0	32.0	3.2651	326,510
1	33.8	3.1031	310,311
2	35.6	2.9501	295,009
3	37.4	2.8055	280,549
4	39.2	2.6688	266,881
5	41.0	2.5396	253,956
6	42.8	2.4173	241,732
7	44.6	2.3017	230,165
8	46.4	2.1922	219,218
9	48.2	2.0885	208,854
10	50.0	1.9904	199,038

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
11	51.8	1.8974	189,739
12	53.6	1.8093	180,927
13	55.4	1.7257	172,573
14	57.2	1.6465	164,653
15	59.0	1.5714	157,140
16	60.8	1.5001	150,012
17	62.6	1.4325	143,248
18	64.4	1.3683	136,826
19	66.2	1.3073	130,727
20	68.0	1.2494	124,935
21	69.8	1.1943	119,431
22	71.6	1.1420	114,200
23	73.4	1.0923	109,227
24	75.2	1.0450	104,498
25	77.0	1.0000	100,000
26	78.8	0.95720	95,720
27	80.6	0.91647	91,647
28	82.4	0.87769	87,769
29	84.2	0.84077	84,077
30	86.0	0.80560	80,560
31	87.8	0.77209	77,209
32	89.6	0.74016	74,016
33	91.4	0.70972	70,972
34	93.2	0.68069	68,069
35	95.0	0.65302	65,302
36	96.8	0.62661	62,661
37	98.6	0.60141	60,141
38	100.4	0.57737	57,737
39	102.2	0.55441	55,441
40	104.0	0.53249	53,249
41	105.8	0.51155	51,155
42	107.6	0.49155	49,155
43	109.4	0.47243	47,243
44	111.2	0.45416	45,416
45	113.0	0.43669	43,669
46	114.8	0.41999	41,999
47	116.6	0.40401	40,401
48	118.4	0.38873	38,873
49	120.2	0.37410	37,410
50	122.0	0.36010	36,010

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
51	123.8	0.34670	34,670
52	125.6	0.33386	33,386
53	127.4	0.32157	32,157
54	129.2	0.30979	30,979
55	131.0	0.29851	29,851
56	132.8	0.28770	28,770
57	134.6	0.27733	27,733
58	136.4	0.26739	26,739
59	138.2	0.25786	25,786
60	140.0	0.24871	24,871
61	141.8	0.23994	23,994
62	143.6	0.23152	23,152
63	145.4	0.22344	22,344
64	147.2	0.21568	21,568
65	149.0	0.20823	20,823
66	150.8	0.20108	20,108
67	152.6	0.19421	19,421
68	154.4	0.18761	18,761
69	156.2	0.18126	18,126
70	158.0	0.17516	17,516
71	159.8	0.16930	16,930
72	161.6	0.16366	16,366
73	163.4	0.15824	15,824
74	165.2	0.15303	15,303
75	167.0	0.14801	14,801
76	168.8	0.14320	14,320
77	170.6	0.13856	13,856
78	172.4	0.13410	13,410
79	174.2	0.12980	12,980
80	176.0	0.12566	12,566
81	177.8	0.12167	12,167
82	179.6	0.11783	11,783
83	181.4	0.11412	11,412
84	183.2	0.11055	11,055
85	185.0	0.10711	10,711
86	186.8	0.10379	10,379
87	188.6	0.10059	10,059
88	190.4	0.097500	9,750.0
89	192.2	0.094522	9,452.2
90	194.0	0.091648	9,164.8

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
91	195.8	0.088876	8,887.6
92	197.6	0.086200	8,620.0
93	199.4	0.083618	8,361.8
94	201.2	0.081125	8,112.5
95	203.0	0.078718	7,871.8
96	204.8	0.076394	7,639.4
97	206.6	0.074150	7,415.0
98	208.4	0.071982	7,198.2
99	210.2	0.069888	6,988.8
100	212.0	0.067865	6,786.5
101	213.8	0.065910	6,591.0
102	215.6	0.064021	6,402.1
103	217.4	0.062194	6,219.4
104	219.2	0.060429	6,042.9
105	221.0	0.058722	5,872.2
106	222.8	0.057071	5,707.1
107	224.6	0.055475	5,547.5
108	226.4	0.053931	5,393.1
109	228.2	0.052438	5,243.8
110	230.0	0.050992	5,099.2
111	231.8	0.049594	4,959.4
112	233.6	0.048241	4,824.1
113	235.4	0.046931	4,693.1
114	237.2	0.045662	4,566.2
115	239.0	0.044435	4,443.5
116	240.8	0.043246	4,324.6
117	242.6	0.042094	4,209.4
118	244.4	0.040979	4,097.9
119	246.2	0.039899	3,989.9
120	248.0	0.038852	3,885.2
121	249.8	0.037838	3,783.8
122	251.6	0.036855	3,685.5
123	253.4	0.035902	3,590.2
124	255.2	0.034978	3,497.8
125	257.0	0.034083	3,408.3
126	258.8	0.033215	3,321.5
127	260.6	0.032373	3,237.3
128	262.4	0.031556	3,155.6
129	264.2	0.030764	3,076.4
130	266.0	0.029996	2,999.6

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
131	267.8	0.029250	2,925.0
132	269.6	0.028527	2,852.7
133	271.4	0.027824	2,782.4
134	273.2	0.027143	2,714.3
135	275.0	0.026481	2,648.1
136	276.8	0.025839	2,583.9
137	278.6	0.025215	2,521.5
138	280.4	0.024610	2,461.0
139	282.2	0.024021	2,402.1
140	284.0	0.023450	2,345.0
141	285.8	0.022895	2,289.5
142	287.6	0.022355	2,235.5
143	289.4	0.021831	2,183.1
144	291.2	0.021322	2,132.2
145	293.0	0.020827	2,082.7
146	294.8	0.020345	2,034.5
147	296.6	0.019878	1,987.8
148	298.4	0.019423	1,942.3
149	300.2	0.018980	1,898.0
150	302.0	0.018550	1,855.0
151	303.8	0.018119	1,811.9
152	305.6	0.017701	1,770.1
153	307.4	0.017294	1,729.4
154	309.2	0.016899	1,689.9
155	311.0	0.016515	1,651.5
156	312.8	0.016141	1,614.1
157	314.6	0.015778	1,577.8
158	316.4	0.015425	1,542.5
159	318.2	0.015081	1,508.1
160	320.0	0.014747	1,474.7
161	321.8	0.014421	1,442.1
162	323.6	0.014105	1,410.5
163	325.4	0.013796	1,379.6
164	327.2	0.013496	1,349.6
165	329.0	0.013204	1,320.4
166	330.8	0.012920	1,292.0
167	332.6	0.012643	1,264.3
168	334.4	0.012373	1,237.3
169	336.2	0.012111	1,211.1
170	338.0	0.011855	1,185.5

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+ 25°C)	Resistance (Ω Nominal)
171	339.8	0.011606	1,160.6
172	341.6	0.011363	1,136.3
173	343.4	0.011126	1,112.6
174	345.2	0.010895	1,089.5
175	347.0	0.010670	1,067.0
176	348.8	0.010451	1,045.1
177	350.6	0.010237	1,023.7
178	352.4	0.010028	1,002.8
179	354.2	0.009825	982.49
180	356.0	0.009627	962.65
181	357.8	0.009433	943.30
182	359.6	0.009244	924.42
183	361.4	0.009060	906.00
184	363.2	0.008880	888.03
185	365.0	0.008705	870.49
186	366.8	0.008534	853.36
187	368.6	0.008367	836.65
188	370.4	0.008203	820.33
189	372.2	0.008044	804.40
190	374.0	0.007889	788.85
191	375.8	0.007737	773.66
192	377.6	0.007588	758.82
193	379.4	0.007443	744.33
194	381.2	0.007302	730.18
195	383.0	0.007164	716.35
196	384.8	0.007028	702.84
197	386.6	0.006896	689.64
198	388.4	0.006767	676.73
199	390.2	0.006641	664.12
200	392.0	0.006518	651.80
201	393.8	0.006398	639.75
202	395.6	0.006280	627.98
203	397.4	0.006165	616.46
204	399.2	0.006052	605.20
205	401.0	0.005942	594.19
206	402.8	0.005834	583.42
207	404.6	0.005729	572.89
208	406.4	0.005626	562.59
209	408.2	0.005525	552.52
210	410.0	0.005427	542.66

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
211	411.8	0.005330	533.02
212	413.6	0.005236	523.58
213	415.4	0.005143	514.34
214	417.2	0.005053	505.31
215	419.0	0.004965	496.46
216	420.8	0.004878	487.80
217	422.6	0.004793	479.33
218	424.4	0.004710	471.03
219	426.2	0.004629	462.91
220	428.0	0.004550	454.96
221	429.8	0.004472	447.17
222	431.6	0.004396	439.55
223	433.4	0.004321	432.08
224	435.2	0.004248	424.76
225	437.0	0.004176	417.60
226	438.8	0.004106	410.58
227	440.6	0.004037	403.71
228	442.4	0.003970	396.98
229	444.2	0.003904	390.39
230	446.0	0.003839	383.93
231	447.8	0.003776	377.61
232	449.6	0.003714	371.42
233	451.4	0.003654	365.35
234	453.2	0.003594	359.40
235	455.0	0.003536	353.57
236	456.8	0.003479	347.87
237	458.6	0.003423	342.27
238	460.4	0.003368	336.79
239	462.2	0.003314	331.41
240	464.0	0.003262	326.15
241	465.8	0.003210	320.98
242	467.6	0.003159	315.92
243	469.4	0.003110	310.96
244	471.2	0.003061	306.09
245	473.0	0.003013	301.32
246	474.8	0.002966	296.64
247	476.6	0.002921	292.05
248	478.4	0.002876	287.55
249	480.2	0.002831	283.13
250	482.0	0.002788	278.80

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C / R@+25°C)	Resistance (Ω Nominal)
251	483.8	0.002746	274.55
252	485.6	0.002704	270.38
253	487.4	0.002663	266.29
254	489.2	0.002623	262.28
255	491.0	0.002583	258.34
256	492.8	0.002545	254.48
257	494.6	0.002507	250.69
258	496.4	0.002470	246.97
259	498.2	0.002433	243.31
260	500.0	0.002397	239.73
261	501.8	0.002362	236.21
262	503.6	0.002328	232.75
263	505.4	0.002294	229.36
264	507.2	0.002260	226.03
265	509.0	0.002228	222.76
266	510.8	0.002196	219.55
267	512.6	0.002164	216.39
268	514.4	0.002133	213.30
269	516.2	0.002103	210.25
270	518.0	0.002073	207.27
271	519.8	0.002043	204.33
272	521.6	0.002015	201.45
273	523.4	0.001986	198.62
274	525.2	0.001958	195.83
275	527.0	0.001931	193.10
276	528.8	0.001904	190.41
277	530.6	0.001878	187.77
278	532.4	0.001852	185.18
279	534.2	0.001826	182.63
280	536.0	0.001801	180.13
281	537.8	0.001777	177.66
282	539.6	0.001752	175.24
283	541.4	0.001729	172.87
284	543.2	0.001705	170.53
285	545.0	0.001682	168.23
286	546.8	0.001660	165.97
287	548.6	0.001638	163.75
288	550.4	0.001616	161.56
289	552.2	0.001594	159.41
290	554.0	0.001573	157.30

Temperature (°C)	Temperature (°F)	Resistance Ratio (R@x°C/R@+25°C)	Resistance (Ω Nominal)
291	555.8	0.001552	155.23
292	557.6	0.001532	153.18
293	559.4	0.001512	151.17
294	561.2	0.001492	149.20
295	563.0	0.001473	147.25
296	564.8	0.001453	145.34
297	566.6	0.001435	143.46
298	568.4	0.001416	141.61
299	570.2	0.001398	139.79
300	572.0	0.001380	138.00