TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

Specification of Glass NTC Thermistor

PART NUMBER: **TT2-10KC8-3**

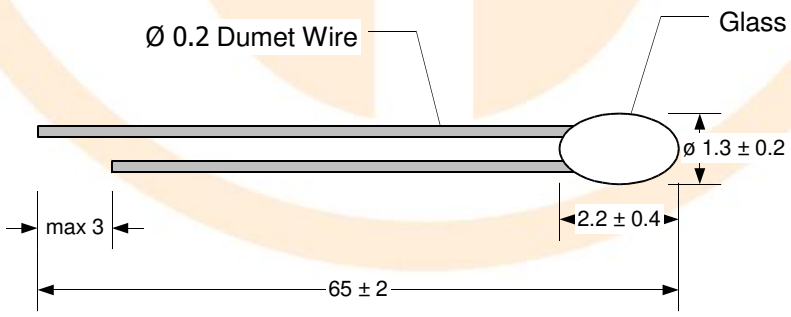
No. of pages: 4

Date: **24.09.2015**
Revision: **00**

FEATURES:

Sensing Element	Glass NTC Thermistor
No-load resistance at 25°C	10 000 Ω
Tolerances at 25°C	± 1%
Beta(25/85) Constant	3435K ± 1%
Operating temperature range	-40°C ÷ 250°C
Dissipation constant	0.7~1.2mW/°C (min, in air)
Thermal time constant	3.5~6.5sec (max, in still air)
RoHS Compatible	**YES**

DRAWING:



UNITS: [mm]

Tewa Temperature Sensors Ltd.
Przeskok 18,
20-403 Lublin,
Poland

Tel. 00 48 81 532 10 79
Fax. 00 48 81 534 79 64
website: www.tewa-sensors.com
email: info@tewa-sensors.com

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

PART NUMBER: **TT2-10KC8-3**

R/T CHARACTERISTIC:

T(℃)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)	DR(%)	DT(℃)
-40	196.7	204.7	213.1	4.10%	0.69
-39	185.8	193.4	201.2	4.04%	0.68
-38	175.7	182.7	190.0	3.98%	0.68
-37	166.1	172.7	179.4	3.92%	0.68
-36	157.2	163.3	169.6	3.86%	0.67
-35	148.8	154.4	160.3	3.80%	0.67
-34	140.9	146.1	151.6	3.75%	0.66
-33	133.4	138.4	143.5	3.69%	0.66
-32	126.4	131.0	135.8	3.63%	0.65
-31	119.8	124.1	128.6	3.58%	0.65
-30	113.6	117.6	121.8	3.52%	0.64
-29	107.8	111.5	115.4	3.47%	0.64
-28	102.28	105.8	109.4	3.41%	0.63
-27	97.09	100.4	103.7	3.36%	0.62
-26	92.20	95.25	98.4	3.30%	0.62
-25	87.58	90.44	93.37	3.25%	0.61
-24	83.23	85.90	88.64	3.20%	0.61
-23	79.12	81.61	84.18	3.14%	0.60
-22	75.24	77.57	79.97	3.09%	0.60
-21	71.57	73.75	75.99	3.04%	0.59
-20	68.11	70.15	72.24	2.99%	0.59
-19	64.83	66.74	68.70	2.94%	0.58
-18	61.73	63.52	65.35	2.88%	0.57
-17	58.80	60.48	62.19	2.83%	0.57
-16	56.03	57.60	59.20	2.78%	0.56
-15	53.41	54.87	56.37	2.73%	0.56
-14	50.92	52.29	53.70	2.68%	0.55
-13	48.57	49.85	51.17	2.64%	0.54
-12	46.34	47.54	48.77	2.59%	0.54
-11	44.22	45.35	46.50	2.54%	0.53
-10	42.22	43.27	44.35	2.49%	0.53
-9	40.32	41.30	42.31	2.44%	0.52
-8	38.51	39.44	40.38	2.40%	0.51
-7	36.80	37.67	38.55	2.35%	0.51
-6	35.17	35.99	36.81	2.30%	0.50
-5	33.63	34.39	35.17	2.26%	0.49
-4	32.16	32.88	33.60	2.21%	0.49
-3	30.77	31.44	32.12	2.16%	0.48
-2	29.44	30.07	30.71	2.12%	0.47
-1	28.18	28.77	29.37	2.07%	0.47
0	26.98	27.53	28.09	2.03%	0.46
1	25.84	26.36	26.88	1.98%	0.45
2	24.76	25.24	25.73	1.94%	0.44
3	23.72	24.18	24.64	1.90%	0.44
4	22.74	23.16	23.59	1.85%	0.43
5	21.80	22.20	22.60	1.81%	0.42
6	20.91	21.28	21.66	1.77%	0.42
7	20.06	20.41	20.76	1.72%	0.41
8	19.25	19.57	19.90	1.68%	0.40
9	18.47	18.78	19.09	1.64%	0.39
10	17.73	18.02	18.31	1.60%	0.39
11	17.03	17.30	17.57	1.55%	0.38
12	16.36	16.61	16.86	1.51%	0.37
13	15.72	15.95	16.18	1.47%	0.36
14	15.10	15.32	15.54	1.43%	0.36
15	14.52	14.72	14.92	1.39%	0.35
16	13.96	14.15	14.34	1.35%	0.34
17	13.42	13.60	13.78	1.31%	0.33
18	12.91	13.08	13.24	1.27%	0.32
19	12.42	12.58	12.73	1.23%	0.32
20	11.95	12.10	12.24	1.19%	0.31
21	11.51	11.64	11.77	1.15%	0.30
22	11.08	11.20	11.33	1.11%	0.29
23	10.67	10.78	10.90	1.08%	0.28
24	10.276	10.38	10.49	1.04%	0.27
25	9.900	10.00	10.10	1.00%	0.27
26	9.533	9.633	9.73	1.04%	0.28
27	9.181	9.281	9.381	1.08%	0.29
28	8.845	8.944	9.043	1.11%	0.30
29	8.522	8.621	8.720	1.15%	0.31
30	8.213	8.311	8.410	1.19%	0.33
31	7.917	8.015	8.113	1.22%	0.34
32	7.633	7.730	7.827	1.26%	0.35
33	7.361	7.457	7.554	1.30%	0.36
34	7.100	7.195	7.291	1.33%	0.38
35	6.849	6.944	7.039	1.37%	0.39
36	6.609	6.703	6.797	1.40%	0.40
37	6.379	6.471	6.564	1.44%	0.41
38	6.157	6.249	6.341	1.48%	0.43
39	5.945	6.035	6.126	1.51%	0.44
40	5.741	5.830	5.920	1.55%	0.45
41	5.545	5.633	5.722	1.58%	0.46
42	5.356	5.443	5.531	1.62%	0.48
43	5.175	5.261	5.348	1.65%	0.49
44	5.001	5.086	5.172	1.69%	0.50
45	4.834	4.918	5.002	1.72%	0.52
46	4.673	4.756	4.839	1.75%	0.53
47	4.519	4.600	4.682	1.79%	0.54
48	4.370	4.450	4.531	1.82%	0.56
49	4.227	4.305	4.385	1.85%	0.57
50	4.089	4.166	4.245	1.89%	0.58
51	3.956	4.033	4.110	1.92%	0.60
52	3.829	3.904	3.980	1.95%	0.61
53	3.706	3.780	3.855	1.99%	0.63
54	3.587	3.660	3.734	2.02%	0.64
55	3.473	3.545	3.618	2.05%	0.65
56	3.363	3.434	3.505	2.09%	0.67
57	3.257	3.327	3.397	2.12%	0.68
58	3.155	3.224	3.293	2.15%	0.70
59	3.057	3.124	3.192	2.18%	0.71
60	2.962	3.028	3.095	2.21%	0.72

Tewa Temperature Sensors Ltd.
Przeskok 18,
20-403 Lublin,
Poland

Tel. 00 48 81 532 10 79
Fax. 00 48 81 534 79 64
website: www.tewa-sensors.com
email: info@tewa-sensors.com

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

PART NUMBER: **TT2-10KC8-3**

R/T CHARACTERISTIC:

T(℃)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)	DR(%)	DT(℃)	T(℃)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)	DR(%)	DT(℃)
61	2.871	2.935	3.001	2.25%	0.74	111	0.7037	0.7297	0.7565	3.68%	1.56
62	2.782	2.846	2.911	2.28%	0.75	112	0.6861	0.7116	0.7379	3.70%	1.58
63	2.697	2.760	2.823	2.31%	0.77	113	0.6690	0.6940	0.7199	3.73%	1.59
64	2.615	2.677	2.739	2.34%	0.78	114	0.6523	0.6769	0.7023	3.76%	1.61
65	2.536	2.596	2.658	2.37%	0.80	115	0.6362	0.6603	0.6853	3.78%	1.63
66	2.459	2.519	2.579	2.40%	0.81	116	0.6205	0.6442	0.6687	3.81%	1.65
67	2.385	2.444	2.503	2.43%	0.83	117	0.6052	0.6285	0.6526	3.83%	1.67
68	2.314	2.371	2.430	2.46%	0.84	118	0.5904	0.6132	0.6369	3.86%	1.69
69	2.245	2.301	2.359	2.49%	0.86	119	0.5760	0.5984	0.6216	3.88%	1.71
70	2.179	2.234	2.290	2.53%	0.87	120	0.5619	0.5840	0.6068	3.91%	1.72
71	2.114	2.169	2.224	2.56%	0.89	121	0.5483	0.5699	0.5924	3.94%	1.74
72	2.052	2.106	2.160	2.59%	0.90	122	0.5351	0.5563	0.5783	3.96%	1.76
73	1.992	2.045	2.098	2.62%	0.92	123	0.5222	0.5431	0.5647	3.99%	1.78
74	1.934	1.986	2.038	2.65%	0.93	124	0.5097	0.5302	0.5514	4.01%	1.80
75	1.878	1.929	1.980	2.68%	0.95	125	0.4975	0.5176	0.5385	4.04%	1.82
76	1.824	1.874	1.924	2.71%	0.96	126	0.4856	0.5054	0.5259	4.06%	1.84
77	1.772	1.820	1.870	2.74%	0.98	127	0.4741	0.4935	0.5137	4.09%	1.86
78	1.721	1.769	1.818	2.76%	1.00	128	0.4629	0.4820	0.5018	4.11%	1.88
79	1.672	1.719	1.767	2.79%	1.01	129	0.4520	0.4707	0.4902	4.13%	1.90
80	1.625	1.671	1.718	2.82%	1.03	130	0.4414	0.4598	0.4789	4.16%	1.92
81	1.579	1.624	1.670	2.85%	1.04	131	0.4310	0.4491	0.4679	4.18%	1.94
82	1.534	1.579	1.624	2.88%	1.06	132	0.4210	0.4388	0.4572	4.21%	1.96
83	1.491	1.535	1.579	2.91%	1.08	133	0.4112	0.4287	0.4468	4.23%	1.98
84	1.450	1.492	1.536	2.94%	1.09	134	0.4017	0.4188	0.437	4.26%	2.00
85	1.409	1.451	1.494	2.97%	1.11	135	0.3924	0.4093	0.4268	4.28%	2.02
86	1.370	1.412	1.454	3.00%	1.12	136	0.3834	0.4000	0.4172	4.30%	2.04
87	1.333	1.373	1.415	3.03%	1.14	137	0.3746	0.3909	0.4078	4.33%	2.06
88	1.296	1.336	1.377	3.05%	1.16	138	0.3661	0.3821	0.3987	4.35%	2.08
89	1.261	1.300	1.340	3.08%	1.17	139	0.3578	0.3735	0.3898	4.38%	2.10
90	1.226	1.265	1.304	3.11%	1.19	140	0.3497	0.3651	0.3811	4.40%	2.12
91	1.193	1.231	1.269	3.14%	1.21	141	0.3418	0.3569	0.3727	4.4%	2.14
92	1.161	1.198	1.236	3.17%	1.22	142	0.3341	0.3490	0.3645	4.4%	2.16
93	1.130	1.166	1.203	3.19%	1.24	143	0.3266	0.3412	0.3565	4.5%	2.18
94	1.099	1.135	1.171	3.22%	1.26	144	0.3193	0.3337	0.3487	4.5%	2.20
95	1.070	1.105	1.141	3.25%	1.28	145	0.3122	0.3263	0.3411	4.5%	2.22
96	1.042	1.076	1.111	3.28%	1.29	146	0.3053	0.3192	0.3337	4.5%	2.24
97	1.014	1.048	1.082	3.30%	1.31	147	0.2986	0.3122	0.3264	4.6%	2.26
98	0.9872	1.020	1.054	3.33%	1.33	148	0.2920	0.3054	0.3194	4.6%	2.28
99	0.9612	0.9936	1.027	3.36%	1.34	149	0.2856	0.2988	0.3126	4.6%	2.30
100	0.9361	0.9679	1.0006	3.39%	1.36	150	0.2794	0.2923	0.3059	4.6%	2.33
101	0.9116	0.9429	0.9750	3.41%	1.38	151	0.2733	0.2860	0.2993	4.7%	2.35
102	0.8880	0.9186	0.9502	3.44%	1.40	152	0.2674	0.2799	0.2930	4.7%	2.37
103	0.8650	0.8950	0.9261	3.47%	1.41	153	0.2616	0.2739	0.2868	4.7%	2.39
104	0.8427	0.8722	0.9027	3.49%	1.43	154	0.2560	0.2681	0.2807	4.7%	2.41
105	0.8210	0.8500	0.8799	3.52%	1.45	155	0.2505	0.2624	0.2749	4.7%	2.43
106	0.8000	0.8284	0.8578	3.55%	1.47	156	0.2452	0.2569	0.2691	4.8%	2.45
107	0.7796	0.8075	0.8364	3.57%	1.48	157	0.2399	0.2515	0.2635	4.8%	2.48
108	0.7598	0.7872	0.8155	3.60%	1.50	158	0.2349	0.2462	0.2580	4.8%	2.50
109	0.7405	0.7675	0.7953	3.63%	1.52	159	0.2299	0.2411	0.2527	4.8%	2.52
110	0.7218	0.7483	0.7756	3.65%	1.54	160	0.2251	0.2361	0.2475	4.9%	2.54

Tewa Temperature Sensors Ltd.
Przeskok 18,
20-403 Lublin,
Poland

Tel. 00 48 81 532 10 79
Fax. 00 48 81 534 79 64
website: www.tewa-sensors.com
email: info@tewa-sensors.com

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

PART NUMBER: **TT2-10KC8-3**

R/T CHARACTERISTIC:

T(℃)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)	DR(%)	DT(℃)
161	0.2204	0.2312	0.2424	4.9%	2.56
162	0.2158	0.2264	0.2375	4.9%	2.59
163	0.2113	0.2218	0.2327	4.9%	2.61
164	0.2070	0.2172	0.2280	4.9%	2.63
165	0.2027	0.2128	0.2234	5.0%	2.65
166	0.1986	0.2085	0.2189	5.0%	2.68
167	0.1945	0.2043	0.2145	5.0%	2.70
168	0.1906	0.2002	0.2103	5.0%	2.72
169	0.1868	0.1962	0.2061	5.0%	2.74
170	0.1830	0.1923	0.2020	5.1%	2.77
171	0.1793	0.1885	0.1981	5.1%	2.79
172	0.1758	0.1848	0.1942	5.1%	2.81
173	0.1723	0.1811	0.1904	5.1%	2.83
174	0.1689	0.1776	0.1868	5.2%	2.86
175	0.1656	0.1742	0.1832	5.2%	2.88
176	0.1623	0.1708	0.1797	5.2%	2.90
177	0.1592	0.1675	0.1762	5.2%	2.93
178	0.1561	0.1643	0.1729	5.2%	2.95
179	0.1531	0.1612	0.1696	5.3%	2.97
180	0.1502	0.1581	0.1665	5.3%	3.00
181	0.1473	0.1551	0.1633	5.3%	3.02
182	0.1445	0.1522	0.1603	5.3%	3.04
183	0.1418	0.1494	0.1574	5.3%	3.07
184	0.1391	0.1466	0.1545	5.4%	3.09
185	0.1365	0.1439	0.1516	5.4%	3.12
186	0.1340	0.1413	0.1489	5.4%	3.14
187	0.1315	0.1387	0.1462	5.4%	3.16
188	0.1291	0.1362	0.1436	5.4%	3.19
189	0.1268	0.1337	0.1410	5.5%	3.21
190	0.1245	0.1313	0.1385	5.5%	3.24
191	0.1222	0.1290	0.1361	5.5%	3.26
192	0.1201	0.1267	0.1337	5.5%	3.29
193	0.1179	0.1245	0.1313	5.5%	3.31
194	0.1158	0.1223	0.1291	5.5%	3.34
195	0.1138	0.1202	0.1268	5.6%	3.36
196	0.1118	0.1181	0.1247	5.6%	3.39
197	0.1099	0.1161	0.1226	5.6%	3.41
198	0.1080	0.1141	0.1205	5.6%	3.43
199	0.1061	0.1121	0.1185	5.6%	3.46
200	0.1043	0.1103	0.1165	5.7%	3.49
201	0.1026	0.1084	0.1146	5.7%	3.51
202	0.1009	0.1066	0.1127	5.7%	3.54
203	0.0992	0.1049	0.1109	5.7%	3.56
204	0.0976	0.1032	0.1091	5.7%	3.59
205	0.0960	0.1015	0.1073	5.7%	3.61
206	0.0944	0.0999	0.1056	5.8%	3.64
207	0.0929	0.0983	0.1039	5.8%	3.66
208	0.0914	0.0967	0.1023	5.8%	3.69
209	0.0900	0.0952	0.1007	5.8%	3.72
210	0.0885	0.0937	0.0992	5.8%	3.74
211	0.0872	0.0923	0.0977	5.8%	3.77
212	0.0858	0.0909	0.0962	5.9%	3.79
213	0.0845	0.0895	0.0947	5.9%	3.82
214	0.0832	0.0881	0.0933	5.9%	3.85
215	0.0820	0.0868	0.0920	5.9%	3.87
216	0.0808	0.0856	0.0906	5.9%	3.90
217	0.0796	0.0843	0.0893	5.9%	3.93
218	0.0784	0.0831	0.0880	6.0%	3.95
219	0.0773	0.0819	0.0868	6.0%	3.98
220	0.0762	0.0807	0.0856	6.0%	4.01
221	0.0751	0.0796	0.0844	6.0%	4.03
222	0.0740	0.0785	0.0832	6.0%	4.06
223	0.0730	0.0774	0.0821	6.0%	4.09
224	0.0720	0.0764	0.0810	6.0%	4.12
225	0.0711	0.0754	0.0799	6.1%	4.14
226	0.0701	0.0744	0.0789	6.1%	4.17
227	0.0692	0.0734	0.0779	6.1%	4.20
228	0.0683	0.0725	0.0769	6.1%	4.23
229	0.0674	0.0715	0.0759	6.1%	4.25
230	0.0665	0.0706	0.0750	6.1%	4.28
231	0.0657	0.0698	0.0740	6.1%	4.31
232	0.0649	0.0689	0.0731	6.2%	4.34
233	0.0641	0.0681	0.0723	6.2%	4.36
234	0.0633	0.0673	0.0714	6.2%	4.39
235	0.0626	0.0665	0.0706	6.2%	4.42
236	0.0619	0.0657	0.0698	6.2%	4.45
237	0.0612	0.0650	0.0690	6.2%	4.48
238	0.0605	0.0642	0.0682	6.2%	4.51
239	0.0598	0.0635	0.0675	6.2%	4.53
240	0.0591	0.0628	0.0668	6.3%	4.56
241	0.0585	0.0622	0.0661	6.3%	4.59
242	0.0579	0.0615	0.0654	6.3%	4.62
243	0.0573	0.0609	0.0647	6.3%	4.65
244	0.0567	0.0603	0.0641	6.3%	4.68
245	0.0562	0.0597	0.0635	6.3%	4.71
246	0.0556	0.0591	0.0629	6.3%	4.74
247	0.0551	0.0586	0.0623	6.3%	4.77
248	0.0546	0.0580	0.0617	6.3%	4.80
249	0.0541	0.0575	0.0612	6.3%	4.83
250	0.0536	0.0570	0.0606	6.4%	4.86

Tewa Temperature Sensors Ltd.
Przeskok 18,
20-403 Lublin,
Poland

Tel. 00 48 81 532 10 79
Fax. 00 48 81 534 79 64
website: www.tewa-sensors.com
email: info@tewa-sensors.com