

Specification of Glass Thermistor

PART NUMBER: **TT2-50KC3-9**

No. of pages: 7

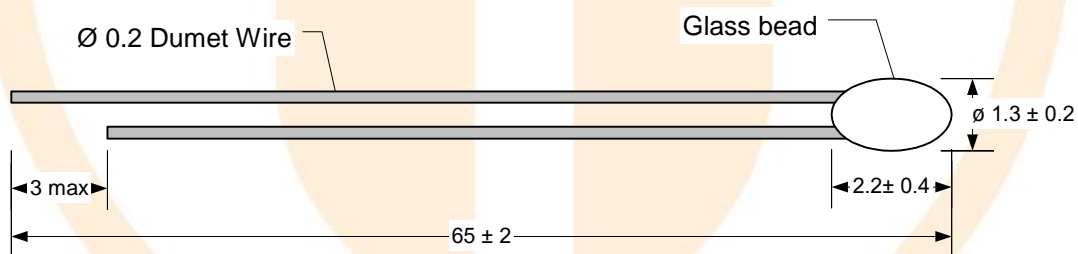
Date: 19.02.2019

Revision: 00

FEATURES:

Element	Glass NTC Thermistor
No-load resistance at 25°C	50 000 Ω
Tolerance at 25°C	± 2.5%
Beta(25/85) Constant	3990K ± 1%
Operating temperature range	-40°C ÷ 200°C

DRAWING:



UNITS: [mm]

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

T(°C)	Rmin(kΩ)	Rcent(kΩ)	Rmax(kΩ)	DR(%)	DT(°C)
-40	1455.1	1544.5	1638.4	6.08%	0.90
-39	1365.1	1448.0	1535.0	6.01%	0.90
-38	1281.2	1358.2	1438.9	5.94%	0.89
-37	1203.2	1274.6	1349.5	5.87%	0.89
-36	1130.4	1196.8	1266.2	5.81%	0.89
-35	1062.5	1124.2	1188.7	5.74%	0.88
-34	999.11	1056.5	1116.4	5.68%	0.88
-33	939.95	993.31	1049.0	5.61%	0.88
-32	884.69	934.33	986.14	5.55%	0.87
-31	833.03	879.24	927.44	5.48%	0.87
-30	784.73	827.76	872.60	5.42%	0.87
-29	739.53	779.61	821.36	5.35%	0.86
-28	697.22	734.58	773.45	5.29%	0.86
-27	657.60	692.42	728.63	5.23%	0.85
-26	620.47	652.95	686.69	5.17%	0.85
-25	585.67	615.96	647.42	5.11%	0.85
-24	553.03	581.30	610.63	5.05%	0.84
-23	522.41	548.80	576.15	4.99%	0.84
-22	493.67	518.30	543.83	4.93%	0.83
-21	466.67	489.69	513.51	4.87%	0.83
-20	441.32	462.82	485.06	4.81%	0.83
-19	417.48	437.58	458.35	4.75%	0.82
-18	395.08	413.86	433.27	4.69%	0.82
-17	374.00	391.57	409.70	4.63%	0.81
-16	354.17	370.60	387.55	4.57%	0.81
-15	335.50	350.88	366.72	4.52%	0.80
-14	317.92	332.31	347.13	4.46%	0.80
-13	301.36	314.83	328.70	4.40%	0.79
-12	285.76	298.37	311.34	4.35%	0.79
-11	271.05	282.86	295.00	4.29%	0.78
-10	257.18	268.24	279.60	4.24%	0.78
-9	244.09	254.46	265.10	4.18%	0.77
-8	231.74	241.46	251.42	4.13%	0.77
-7	220.08	229.19	238.52	4.07%	0.76
-6	209.08	217.61	226.36	4.02%	0.76
-5	198.68	206.68	214.88	3.97%	0.75
-4	188.85	196.36	204.04	3.91%	0.75
-3	179.56	186.61	193.81	3.86%	0.74
-2	170.78	177.39	184.14	3.81%	0.74
-1	162.48	168.68	175.01	3.75%	0.73
0	154.62	160.44	166.38	3.70%	0.73
1	147.18	152.65	158.22	3.65%	0.72
2	140.14	145.27	150.50	3.60%	0.72

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

3	133.47	138.29	143.20	3.55%	0.71
4	127.16	131.69	136.29	3.50%	0.71
5	121.17	125.43	129.75	3.45%	0.70
6	115.50	119.50	123.56	3.40%	0.69
7	110.13	113.88	117.69	3.35%	0.69
8	105.03	108.56	112.14	3.30%	0.68
9	100.19	103.51	106.87	3.25%	0.68
10	95.601	98.722	101.88	3.20%	0.67
11	91.246	94.180	97.147	3.15%	0.66
12	87.111	89.870	92.658	3.10%	0.66
13	83.185	85.779	88.400	3.05%	0.65
14	79.455	81.896	84.358	3.01%	0.65
15	75.912	78.207	80.522	2.96%	0.64
16	72.544	74.704	76.880	2.91%	0.63
17	69.344	71.375	73.420	2.87%	0.63
18	66.300	68.212	70.134	2.82%	0.62
19	63.406	65.204	67.012	2.77%	0.61
20	60.652	62.344	64.044	2.73%	0.61
21	58.032	59.625	61.223	2.68%	0.60
22	55.538	57.037	58.540	2.64%	0.59
23	53.164	54.575	55.988	2.59%	0.59
24	50.903	52.231	53.560	2.54%	0.58
25	48.750	50.000	51.250	2.50%	0.57
26	46.658	47.875	49.093	2.54%	0.59
27	44.666	45.851	47.038	2.59%	0.60
28	42.770	43.923	45.080	2.63%	0.62
29	40.963	42.086	43.212	2.68%	0.63
30	39.242	40.334	41.432	2.72%	0.64
31	37.601	38.665	39.733	2.76%	0.66
32	36.038	37.072	38.113	2.81%	0.67
33	34.547	35.554	36.567	2.85%	0.69
34	33.125	34.105	35.091	2.89%	0.70
35	31.769	32.722	33.682	2.94%	0.72
36	30.475	31.402	32.337	2.98%	0.73
37	29.240	30.142	31.052	3.02%	0.74
38	28.061	28.939	29.825	3.06%	0.76
39	26.936	27.789	28.652	3.10%	0.77
40	25.861	26.691	27.531	3.15%	0.79
41	24.835	25.642	26.459	3.19%	0.80
42	23.854	24.640	25.435	3.23%	0.82
43	22.917	23.681	24.455	3.27%	0.83
44	22.022	22.765	23.518	3.31%	0.85
45	21.165	21.888	22.621	3.35%	0.87
46	20.347	21.050	21.763	3.39%	0.88

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

47	19.564	20.247	20.942	3.43%	0.90
48	18.815	19.480	20.156	3.47%	0.91
49	18.098	18.745	19.403	3.51%	0.93
50	17.412	18.042	18.682	3.55%	0.94
51	16.756	17.368	17.991	3.59%	0.96
52	16.127	16.723	17.330	3.63%	0.98
53	15.525	16.105	16.695	3.67%	0.99
54	14.949	15.513	16.088	3.71%	1.01
55	14.396	14.945	15.505	3.75%	1.02
56	13.867	14.401	14.946	3.78%	1.04
57	13.360	13.880	14.410	3.82%	1.06
58	12.874	13.379	13.896	3.86%	1.07
59	12.408	12.900	13.403	3.90%	1.09
60	11.961	12.440	12.929	3.94%	1.11
61	11.532	11.998	12.475	3.97%	1.12
62	11.121	11.574	12.039	4.01%	1.14
63	10.727	11.168	11.620	4.05%	1.16
64	10.348	10.777	11.218	4.09%	1.17
65	9.984	10.402	10.831	4.12%	1.19
66	9.635	10.042	10.460	4.16%	1.21
67	9.300	9.697	10.103	4.20%	1.23
68	8.978	9.364	9.760	4.23%	1.24
69	8.669	9.045	9.431	4.27%	1.26
70	8.372	8.738	9.114	4.30%	1.28
71	8.087	8.443	8.809	4.34%	1.30
72	7.812	8.159	8.516	4.38%	1.31
73	7.549	7.887	8.234	4.41%	1.33
74	7.295	7.624	7.963	4.45%	1.35
75	7.051	7.372	7.702	4.48%	1.37
76	6.817	7.129	7.451	4.52%	1.38
77	6.591	6.895	7.209	4.55%	1.40
78	6.374	6.670	6.976	4.59%	1.42
79	6.165	6.454	6.752	4.62%	1.44
80	5.964	6.245	6.536	4.65%	1.46
81	5.770	6.045	6.328	4.69%	1.48
82	5.584	5.851	6.128	4.72%	1.49
83	5.404	5.665	5.935	4.76%	1.51
84	5.232	5.486	5.748	4.79%	1.53
85	5.065	5.313	5.569	4.82%	1.55
86	4.904	5.146	5.396	4.86%	1.57
87	4.750	4.985	5.229	4.89%	1.59
88	4.601	4.830	5.068	4.92%	1.61
89	4.457	4.681	4.913	4.96%	1.63
90	4.318	4.537	4.763	4.99%	1.65

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

91	4.185	4.398	4.619	5.02%	1.67
92	4.056	4.264	4.479	5.05%	1.68
93	3.932	4.134	4.345	5.09%	1.70
94	3.812	4.009	4.215	5.12%	1.72
95	3.696	3.889	4.089	5.15%	1.74
96	3.584	3.772	3.968	5.18%	1.76
97	3.477	3.660	3.851	5.22%	1.78
98	3.372	3.552	3.738	5.25%	1.80
99	3.272	3.447	3.629	5.28%	1.82
100	3.175	3.346	3.523	5.31%	1.84
101	3.081	3.248	3.421	5.34%	1.86
102	2.991	3.153	3.323	5.37%	1.88
103	2.903	3.062	3.227	5.40%	1.90
104	2.819	2.974	3.135	5.43%	1.92
105	2.737	2.888	3.046	5.46%	1.94
106	2.658	2.806	2.960	5.50%	1.97
107	2.582	2.726	2.877	5.53%	1.99
108	2.508	2.649	2.796	5.56%	2.01
109	2.437	2.574	2.718	5.59%	2.03
110	2.368	2.502	2.643	5.62%	2.05
111	2.301	2.432	2.570	5.65%	2.07
112	2.236	2.365	2.499	5.68%	2.09
113	2.174	2.299	2.431	5.71%	2.11
114	2.113	2.236	2.364	5.73%	2.13
115	2.055	2.175	2.300	5.76%	2.15
116	1.998	2.115	2.238	5.79%	2.18
117	1.944	2.058	2.178	5.82%	2.20
118	1.890	2.002	2.119	5.85%	2.22
119	1.839	1.948	2.063	5.88%	2.24
120	1.789	1.896	2.008	5.91%	2.26
121	1.741	1.846	1.955	5.94%	2.28
122	1.694	1.797	1.904	5.97%	2.31
123	1.649	1.749	1.854	6.00%	2.33
124	1.605	1.703	1.806	6.02%	2.35
125	1.563	1.658	1.759	6.05%	2.37
126	1.522	1.615	1.713	6.08%	2.39
127	1.482	1.573	1.669	6.11%	2.42
128	1.443	1.533	1.627	6.14%	2.44
129	1.406	1.493	1.585	6.16%	2.46
130	1.369	1.455	1.545	6.19%	2.48
131	1.334	1.418	1.506	6.22%	2.51
132	1.300	1.382	1.468	6.25%	2.53
133	1.266	1.347	1.431	6.27%	2.55
134	1.234	1.313	1.395	6.30%	2.58

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

135	1.203	1.280	1.361	6.33%	2.60
136	1.173	1.248	1.327	6.35%	2.62
137	1.143	1.217	1.295	6.38%	2.65
138	1.115	1.187	1.263	6.41%	2.67
139	1.087	1.158	1.232	6.43%	2.69
140	1.060	1.129	1.202	6.46%	2.72
141	1.034	1.102	1.173	6.5%	2.74
142	1.008	1.075	1.145	6.5%	2.76
143	0.9838	1.049	1.117	6.5%	2.79
144	0.9598	1.023	1.091	6.6%	2.81
145	0.9366	0.9989	1.065	6.6%	2.83
146	0.9140	0.9751	1.040	6.6%	2.86
147	0.8920	0.9519	1.015	6.6%	2.88
148	0.8707	0.9293	0.9913	6.7%	2.91
149	0.8499	0.9074	0.9681	6.7%	2.93
150	0.8298	0.8861	0.9456	6.7%	2.96
151	0.8102	0.8653	0.9237	6.7%	2.98
152	0.7911	0.8452	0.9024	6.8%	3.00
153	0.7726	0.8256	0.8817	6.8%	3.03
154	0.7546	0.8065	0.8615	6.8%	3.05
155	0.7371	0.7880	0.8419	6.8%	3.08
156	0.7200	0.7700	0.8228	6.9%	3.10
157	0.7035	0.7524	0.8043	6.9%	3.13
158	0.6873	0.7353	0.7862	6.9%	3.15
159	0.6716	0.7187	0.7686	6.9%	3.18
160	0.6564	0.7026	0.7515	7.0%	3.20
161	0.6415	0.6868	0.7348	7.0%	3.23
162	0.6271	0.6715	0.7186	7.0%	3.25
163	0.6130	0.6566	0.7028	7.0%	3.28
164	0.5993	0.6420	0.6874	7.1%	3.31
165	0.5860	0.6279	0.6724	7.1%	3.33
166	0.5730	0.6141	0.6578	7.1%	3.36
167	0.5604	0.6007	0.6436	7.1%	3.38
168	0.5481	0.5877	0.6297	7.2%	3.41
169	0.5361	0.5749	0.6162	7.2%	3.43
170	0.5244	0.5625	0.6031	7.2%	3.46
171	0.5130	0.5504	0.5902	7.2%	3.49
172	0.5019	0.5387	0.5777	7.3%	3.51
173	0.4911	0.5272	0.5656	7.3%	3.54
174	0.4806	0.5160	0.5537	7.3%	3.57
175	0.4704	0.5051	0.5421	7.3%	3.59
176	0.4604	0.4945	0.5308	7.3%	3.62
177	0.4507	0.4841	0.5198	7.4%	3.64
178	0.4412	0.4741	0.5091	7.4%	3.67

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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

TEWA TEMPERATURE SENSORS

HIGH PRECISION NTC THERMISTORS AND TEMPERATURE SENSORS

179	0.4319	0.4642	0.4986	7.4%	3.70
180	0.4229	0.4546	0.4884	7.4%	3.73
181	0.4141	0.4452	0.4784	7.5%	3.75
182	0.4055	0.4361	0.4687	7.5%	3.78
183	0.3972	0.4272	0.4592	7.5%	3.81
184	0.3890	0.4185	0.4500	7.5%	3.83
185	0.3810	0.4100	0.4410	7.5%	3.86
186	0.3733	0.4018	0.4322	7.6%	3.89
187	0.3657	0.3937	0.4236	7.6%	3.92
188	0.3583	0.3858	0.4152	7.6%	3.94
189	0.3511	0.3781	0.4070	7.6%	3.97
190	0.3441	0.3706	0.3990	7.7%	4.00
191	0.3372	0.3633	0.3912	7.7%	4.03
192	0.3305	0.3561	0.3835	7.7%	4.05
193	0.3239	0.3492	0.3761	7.7%	4.08
194	0.3175	0.3423	0.3688	7.7%	4.11
195	0.3113	0.3357	0.3617	7.8%	4.14
196	0.3052	0.3292	0.3548	7.8%	4.17
197	0.2993	0.3228	0.3480	7.8%	4.20
198	0.2935	0.3166	0.3414	7.8%	4.22
199	0.2878	0.3106	0.3349	7.8%	4.25
200	0.2822	0.3046	0.3286	7.9%	4.28

Tewa Temperature Sensors Ltd.

Przeskok 18,
20-403 Lublin,
Poland

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