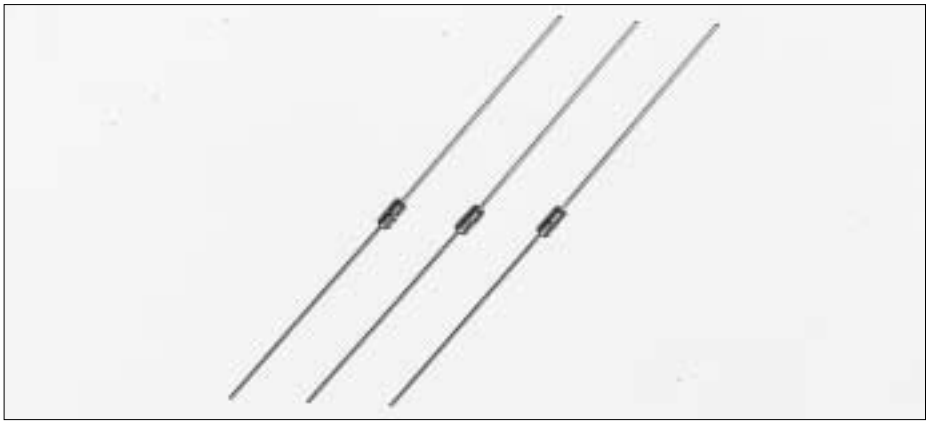
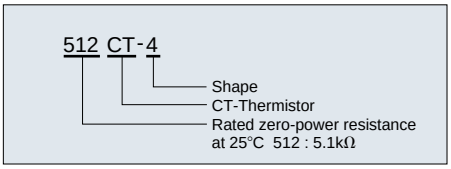
CT THERMISTOR

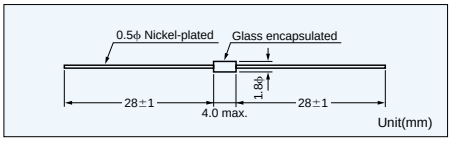
The CT thermistor is a thermal sensor in a DO35 package. Similar to the BT thermistor, it is highly reliable and offers a wide operating range of −50℃ to 250℃. It is primarily used in home electric appliances and features a competitive price for full-automated manufacturing system.



Part number



Dimensions



To allow automatic insertion, this product can be taped.

Specifications

Part No.	R_{25}*1	B value*2	Dissipation factor (mW/℃)	Thermal time constant (s)*3	Rated power at 25℃(mW)	Operating temp. range(℃)
252CT-4	2.5kΩ±5%	3670K±2%	2.1	10~20	10.5	−50~250
512CT-4	5.1kΩ±5%	3200K±2%	2.1	10~20	10.5	−50~200
562CT-4	5.6kΩ±5%	3200K±2%	2.1	10~20	10.5	−50~200
912CT-4	9.1kΩ±5%	3270K±2%	2.1	10~20	10.5	−50~250
103CT-4	10.0kΩ±5%	3270K±2%	2.1	10~20	10.5	−50~250
113CT-4	11.0kΩ±5%	3270K±2%	2.1	10~20	10.5	−50~250
203CT-4	20.0kΩ±5%	3410K±2%	2.1	10~20	10.5	−50~250
473CT-4	47.0kΩ±5%	3610K±2%	2.1	10~20	10.5	−50~250
513CT-4	51.0kΩ±5%	3610K±2%	2.1	10~20	10.5	−50~250
563CT-4	56.0kΩ±5%	3610K±2%	2.1	10~20	10.5	−50~250
104CT-4	100.0kΩ±5%	3450K±2%	2.1	10~20	10.5	−50~250
204CT-4	200.0kΩ±5%	3500K±2%	2.1	10~20	10.5	−50~250

*1 R_{25} : Rated zero-power resistance value at 25℃.
*2 B value : determined by rated zero-power resistance at 25℃ and 85℃.
*3 Time when thermistor temperature reaches 63.2% of the temperature difference. The value is measured in the air.

Resistance-Temperature

Temperature (℃)	Type											
	252CT	512CT	562CT	912CT	103CT	113CT	203CT	473CT	513CT	563CT	104CT	204CT
−50	120.2	137.9	151.4									
−40	65.60	81.02	88.96									
−30	36.48	48.93	53.73	94.62	104.0	114.4						
−20	20.91	30.56	33.55	58.02	63.76	70.13						
−10	12.32	19.65	21.58	36.67	40.29	44.32	81.00					
0	7.516	12.96	14.23	23.82	26.18	28.79	52.63	127.1	138.0	151.5	272.2	553.6
10	4.738	8.779	9.639	15.92	17.49	19.24	35.15	84.16	91.32	100.3	179.4	362.5
20	3.074	6.080	6.676	10.91	11.99	13.18	24.01	56.86	61.70	67.75	120.9	242.5
30	2.045	4.296	4.717	7.626	8.381	9.219	16.74	39.01	42.33	46.47	83.11	165.7
40	1.393	3.095	3.398	5.441	5.980	6.578	11.88	27.07	29.37	32.25	58.23	115.3
50	0.9698	2.267	2.489	3.952	4.342	4.777	8.570	19.05	20.67	22.70	41.52	81.91
60	0.6895	1.687	1.852	2.918	3.206	3.527	6.239	13.58	14.74	16.18	30.14	59.14
70	0.4993	1.270	1.394	2.184	2.400	2.640	4.581	9.807	10.64	11.68	22.19	43.36
80	0.3680	0.9650	1.060	1.656	1.820	2.002	3.401	7.187	7.798	8.559	16.57	32.28
90	0.2757	0.7402	0.8128	1.269	1.394	1.534	2.553	5.327	5.781	6.348	12.52	24.33
100	0.2098	0.5735	0.6298	0.9787	1.076	1.183	1.937	3.997	4.337	4.762	9.586	18.57
110	0.1620	0.4493	0.4933	0.7605	0.8357	0.9193	1.489	3.040	3.298	3.622	7.434	14.36
120	0.1267	0.3559	0.3908	0.5952	0.6540	0.7194	1.156	2.337	2.535	2.784	5.827	11.24
130	0.1003	0.2847	0.3126	0.4702	0.5168	0.5684	0.9075	1.815	1.969	2.162	4.619	8.900
140	0.08028	0.2298	0.2524	0.3750	0.4121	0.4533	0.7191	1.425	1.546	1.698	3.694	7.108
150	0.06494	0.1870	0.2053	0.3016	0.3314	0.3646	0.5752	1.129	1.226	1.346	2.982	5.732
160	0.05302	0.1534	0.1684	0.2444	0.2686	0.2955	0.4638	0.9031	0.9799	1.076	2.428	4.666
170	0.04369	0.1267	0.1391	0.1996	0.2193	0.2413	0.3771	0.7280	0.7899	0.8674	1.992	3.829
180	0.03630	0.1055	0.1158	0.1643	0.1805	0.1986	0.3091	0.5919	0.6422	0.7052	1.647	3.168
190	0.03039	0.08833	0.09699	0.1362	0.1496	0.1646	0.2552	0.4849	0.5261	0.5777	1.371	2.641
200	0.02562	0.07445	0.08175	0.1136	0.1249	0.1374	0.2122	0.4000	0.4341	0.4766	1.149	2.216
210				0.09541	0.1049	0.1153	0.1777	0.3324	0.3607	0.3961	0.9697	1.871
220				0.08063	0.08860	0.09746	0.1497	0.2780	0.3016	0.3312	0.8235	1.591
230				0.06853	0.07531	0.08284	0.1269	0.2339	0.2538	0.2787	0.7033	1.360
240				0.05857	0.06436	0.07080	0.1082	0.1979	0.2147	0.2358	0.6038	1.169
250				0.05031	0.05529	0.06082	0.09271	0.1683	0.1827	0.2006	0.5208	1.010

Unit(kΩ)