



REVISED RECORD SHEET

REV. NO	REV. DATE	REVISED CONTENT
		勝特力材料 886-3-5753170 勝特力电子(上海) 86-21-54151736 勝特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw



NTC Thermistor DHT Type

Edition:DHT0A103J34D2NY-WB060726

INDEX

Page

■ Part number code	1
■ Structure and Dimensions	2
■ Electrical Characteristics	2
■ Reliability	3
■ Soldering Recommendation	4
■ Maximum power rating (Pmax)	5
■ Restrictively used substances	5
■ Storage condition of products	5
■ Safety Approvals	6
■ Certificates	6
■ R-T TABLE	7~15

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Part number code

Example : DHT0A104J39H2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
D	H	T	0	A	1	0	4	J	3	9	H	2	N	Y	

1 ~ 3 th digits : Product Type

Code	Type
DHT	Thinking NTC Thermistor DHT Type

4 th digit: Body Size

Code	Body Size
0	φ 2 mm X L4 mm (max.)

5 th digit : Define of B Value

Code	Define
A	B _{25/85}
B	B _{25/50}

6 ~ 8 th digits : Zero Power

Resistance at 25°C

Code	R ₂₅
102	1 KΩ
103	10 KΩ
104	100 KΩ

9 th digit : Tolerance of R₂₅

Code	Tolerance of R ₂₅
F	± 1 %
G	± 2 %
H	± 3 %
J	± 5 %
K	± 10 %

10~11 th digits : B Value First Two Digits

Code	B Value First Two Digits
30	30
31	31
:	:
40	40
41	41
:	:

12 th digit : B Value Last Two Digits

Code	B Value Last Two Digits
0	00
A	05
1	10
B	15
:	:
H	75
8	80
J	85
:	:

13 th digit : Tolerance of B Value

Code	Tolerance of B Value
1	± 1%
2	± 2 %
3	± 3 %
:	:

14 th digit : Appearance

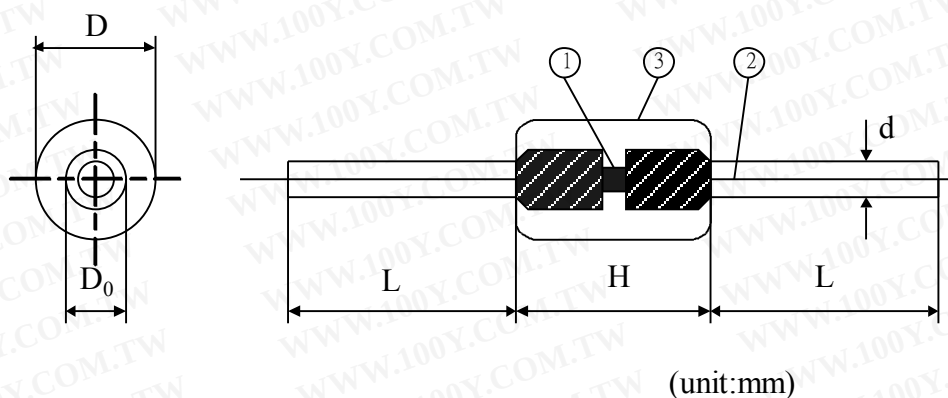
Code	Appearance
N	Wire
:	:

15~16 th digits : Internal Control

Code

01~ZZ
 ex : Y= ROHS Control
 R= Reel
 T= Taping

Structure and Dimensions



D max.	H max.	d nor.	L nor	D ₀
2	4	0.5±0.02	28± 1	0.7 ~0.9

1、Ceramic Chip : NTC Thermistor

2、Leads : Wire

3、Encapsulated : Glass

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Electrical Characteristics

Part no.	Zero power resistance at 25°C (KΩ)	Tolerance of resistance (± %)	B _{25/85} value (K)	Tolerance of B value (± %)	Max. power rating at 25°C (mW)	Thermal dissipation constant (mW/°C)	Thermal time Constant (sec.)	Operating temperature range (°C)
DHT0A103J34D2NY	10	5	3435	2	120	≥2	≤10	-40 ~+300°C

Reliability

Item	Standard	Test conditions / Methods	Specifications															
Tensile Strength of Terminals	IEC68-2-21	Gradually applying the force specified below to each terminal and keeping the unit fixed for 10±1 sec. Terminal diameter (mm) 0.3<d≤0.5 Force (kg) 0.5	No visible damage															
Bending Strength of Terminals	IEC68-2-21	Hanging the force specified below to each terminal and gradually bending each terminal by 90° in one direction, then 90° in the opposite direction, and again back to the origin. Terminal diameter (mm) 0.3<d≤0.5 Force (kg) 0.25	No visible damage															
Solderability	IEC68-2-20	235 ± 5 °C , 2 ± 0.5 sec	At least 95% of terminal electrode is covered by new solder															
Resistance to Soldering Heat	IEC68-2-20	260 ± 5 °C , 10 ± 1 sec	No visible damage △R ₂₅ /R ₂₅ ≤ 3 %															
High Temperature Storage	IEC68-2-2 UL1434	Tmax. ± 5 °C , 1000 ± 24 HRS	No visible damage △R ₂₅ /R ₂₅ ≤ 5 %															
Damp Heat	IEC68-2-3 UL1434	40 ± 2 °C , 9 0 ~ 95 % RH , 1000 ± 24 HRS	No visible damage △R ₂₅ /R ₂₅ ≤ 3 %															
Thermal Shock	IEC68-2-14 UL1434	The thermal shock conditions shown below shall be repeated 5 cycles <table><tr><th>Step</th><th>Temperature (°C)</th><th>Period (minutes)</th></tr><tr><td>1</td><td>T min. ± 5</td><td>30 ± 3</td></tr><tr><td>2</td><td>Room temperature</td><td>5 ± 3</td></tr><tr><td>3</td><td>Tmax. ± 5</td><td>30 ± 3</td></tr><tr><td>4</td><td>Room temperature</td><td>5 ± 3</td></tr></table>	Step	Temperature (°C)	Period (minutes)	1	T min. ± 5	30 ± 3	2	Room temperature	5 ± 3	3	Tmax. ± 5	30 ± 3	4	Room temperature	5 ± 3	No visible damage △R ₂₅ /R ₂₅ ≤ 3 %
Step	Temperature (°C)	Period (minutes)																
1	T min. ± 5	30 ± 3																
2	Room temperature	5 ± 3																
3	Tmax. ± 5	30 ± 3																
4	Room temperature	5 ± 3																
Life Test	CNS5550	25 ± 5 °C , Pmax. , 1000 ± 24 HRS	No visible damage △R ₂₅ /R ₂₅ ≤ 5 %															

Products have been tested at Thinking Electronic

Industrial Co.,Ltd. Laboratory recognized by UL (Underwriters Laboratories Inc.) under CTD

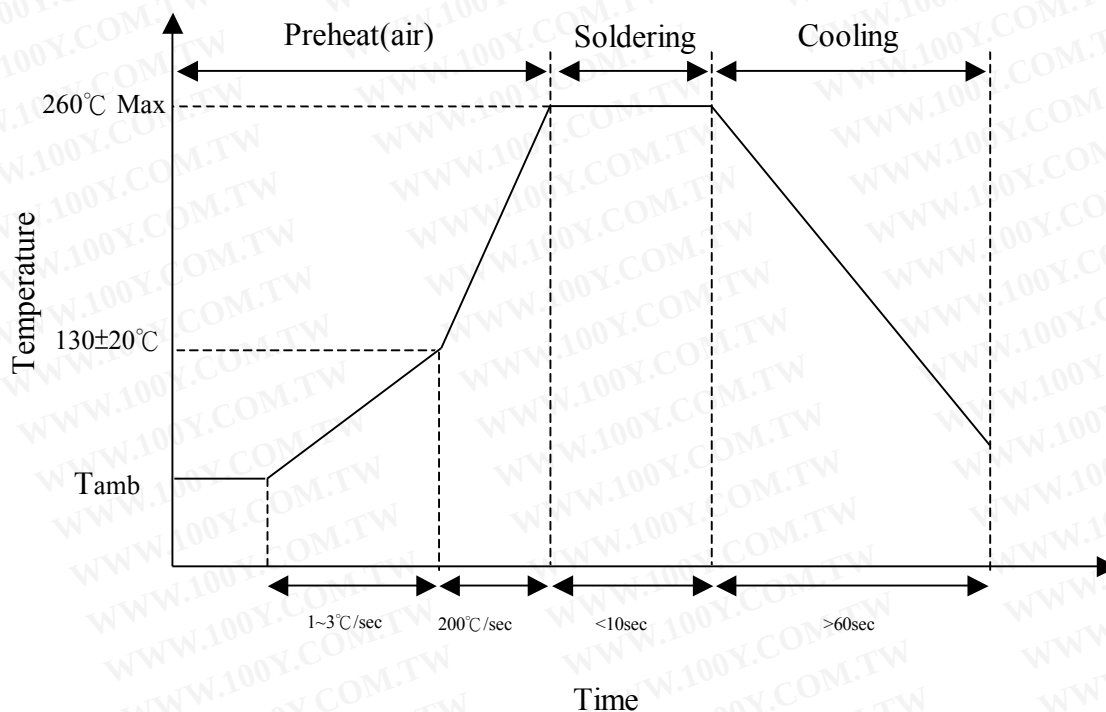
(Client Test Data Program).

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Soldering Recommendation

Wave Flow Soldering Profile

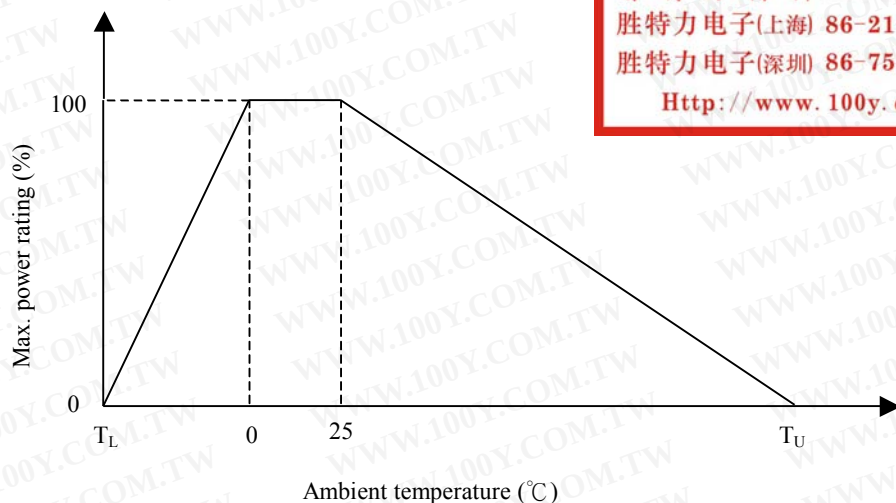
勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)



Recommended Reworking Conditions With Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	2 sec (max.)
Distance from glass encapsulated	6 mm (min.)

Maximum power rating (P_{max})



勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Note: T_L = Minimum Temp. of Operating Temp. Range ($^{\circ}\text{C}$)

T_U = Maximum Temp. of Operating Temp. Range ($^{\circ}\text{C}$)

Restrictively used substances

We promised that Thinking deliver to Customer are free from any of the environmental hazardous substances. (The conditions and details are from customer's requirement and environment regulations.) , But the glass-sealed is excepted .

Storage condition of products

(I) Storage Conditions :

1.Storage Temperature : $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$

2.Relative humidity : $\leq 75\% \text{RH}$

3.Thermistors must be kept away from sunlight and stored in a non-corrosive atmosphere.

(II) Period of Storage : 1 year

Safety Approvals



* UL 1434 / cUL recognized (File # E138827)

Certificates

(1) QS9000 certificate

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Test Report

(1) RoHS SGS test report

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
-40	220.3905	197.7343	176.9636	-2.0	1.8
-39	208.0721	186.8929	167.4497	-1.9	1.8
-38	196.5252	176.7191	158.5117	-1.9	1.8
-37	185.6966	167.1674	150.1109	-1.9	1.8
-36	175.5369	158.1959	142.2115	-1.9	1.8
-35	166.0004	149.7654	134.7805	-1.9	1.8
-34	157.0450	141.8400	127.7869	-1.9	1.8
-33	148.6316	134.3862	121.2024	-1.9	1.8
-32	140.7239	127.3729	115.0004	-1.9	1.8
-31	133.2884	120.7713	109.1561	-1.9	1.8
-30	126.2939	114.5547	103.6469	-1.9	1.8
-29	119.7116	108.6982	98.4513	-1.9	1.7
-28	113.5145	103.1788	93.5496	-1.9	1.7
-27	107.6778	97.9749	88.9234	-1.9	1.7
-26	102.1783	93.0665	84.5554	-1.9	1.7
-25	96.9945	88.4352	80.4297	-1.8	1.7
-24	92.1062	84.0635	76.5313	-1.8	1.7
-23	87.4950	79.9354	72.8464	-1.8	1.7
-22	83.1434	76.0358	69.3620	-1.8	1.7
-21	79.0352	72.3507	66.0659	-1.8	1.7
-20	75.1555	68.8670	62.9469	-1.8	1.7
-19	71.4900	65.5725	59.9944	-1.8	1.7
-18	68.0259	62.4559	57.1986	-1.8	1.7
-17	64.7507	59.5064	54.5502	-1.8	1.7
-16	61.6531	56.7142	52.0405	-1.8	1.7
-15	58.7224	54.0699	49.6615	-1.8	1.7
-14	55.9487	51.5648	47.4056	-1.8	1.7
-13	53.3226	49.1909	45.2658	-1.7	1.7
-12	50.8355	46.9404	43.2354	-1.7	1.7
-11	48.4792	44.8064	41.3082	-1.7	1.6
-10	46.2461	42.7820	39.4784	-1.7	1.6
-9	44.1290	40.8610	37.7404	-1.7	1.6
-8	42.1213	39.0376	36.0892	-1.7	1.6
-7	40.2167	37.3063	34.5199	-1.7	1.6
-6	38.4093	35.6618	33.0280	-1.7	1.6
-5	36.6937	34.0994	31.6093	-1.7	1.6
-4	35.0646	32.6145	30.2598	-1.7	1.6
-3	33.5172	31.2028	28.9757	-1.7	1.6
-2	32.0470	29.8604	27.7535	-1.6	1.6
-1	30.6496	28.5834	26.5898	-1.6	1.6

**R - T TABLE**

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
0	29.3212	27.3683	25.4816	-1.6	1.6
1	28.0579	26.2117	24.4258	-1.6	1.6
2	26.8562	25.1106	23.4198	-1.6	1.6
3	25.7127	24.0620	22.4609	-1.6	1.5
4	24.6243	23.0630	21.5467	-1.6	1.5
5	23.5880	22.1111	20.6748	-1.6	1.5
6	22.6012	21.2038	19.8431	-1.6	1.5
7	21.6611	20.3388	19.0494	-1.5	1.5
8	20.7653	19.5138	18.2919	-1.5	1.5
9	19.9115	18.7269	17.5687	-1.5	1.5
10	19.0975	17.9760	16.8781	-1.5	1.5
11	18.3212	17.2593	16.2184	-1.5	1.5
12	17.5807	16.5752	15.5881	-1.5	1.5
13	16.8742	15.9218	14.9857	-1.5	1.5
14	16.1999	15.2978	14.4099	-1.5	1.4
15	15.5561	14.7016	13.8593	-1.5	1.4
16	14.9414	14.1319	13.3327	-1.4	1.4
17	14.3543	13.5872	12.8290	-1.4	1.4
18	13.7934	13.0665	12.3470	-1.4	1.4
19	13.2575	12.5686	11.8857	-1.4	1.4
20	12.7451	12.0922	11.4440	-1.4	1.4
21	12.2553	11.6364	11.0211	-1.4	1.4
22	11.7869	11.2002	10.6161	-1.4	1.4
23	11.3389	10.7827	10.2281	-1.4	1.4
24	10.9102	10.3829	9.8563	-1.3	1.3
25	10.5000	10.0000	9.5000	-1.3	1.3
26	10.1225	9.6332	9.1447	-1.4	1.4
27	9.7605	9.2818	8.8046	-1.4	1.4
28	9.4133	8.9451	8.4789	-1.4	1.4
29	9.0802	8.6222	8.1669	-1.5	1.4
30	8.7607	8.3127	7.8680	-1.5	1.5
31	8.4540	8.0159	7.5815	-1.5	1.5
32	8.1597	7.7312	7.3070	-1.5	1.5
33	7.8771	7.4581	7.0438	-1.6	1.6
34	7.6057	7.1960	6.7914	-1.6	1.6
35	7.3451	6.9445	6.5493	-1.6	1.6
36	7.0947	6.7030	6.3171	-1.7	1.6
37	6.8541	6.4711	6.0943	-1.7	1.7
38	6.6228	6.2484	5.8804	-1.7	1.7
39	6.4006	6.0345	5.6752	-1.8	1.7

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
40	6.1869	5.8290	5.4781	-1.8	1.8
41	5.9814	5.6315	5.2888	-1.8	1.8
42	5.7837	5.4417	5.1070	-1.9	1.8
43	5.5936	5.2592	4.9324	-1.9	1.8
44	5.4106	5.0837	4.7646	-1.9	1.9
45	5.2345	4.9149	4.6033	-2.0	1.9
46	5.0651	4.7526	4.4483	-2.0	1.9
47	4.9019	4.5965	4.2993	-2.0	2.0
48	4.7448	4.4462	4.1559	-2.1	2.0
49	4.5935	4.3015	4.0181	-2.1	2.0
50	4.4477	4.1623	3.8855	-2.1	2.1
51	4.3072	4.0282	3.7578	-2.2	2.1
52	4.1718	3.8990	3.6349	-2.2	2.1
53	4.0413	3.7746	3.5167	-2.2	2.1
54	3.9156	3.6548	3.4029	-2.3	2.2
55	3.7944	3.5394	3.2933	-2.3	2.2
56	3.6775	3.4282	3.1878	-2.3	2.2
57	3.5648	3.3210	3.0862	-2.4	2.3
58	3.4561	3.2177	2.9883	-2.4	2.3
59	3.3513	3.1182	2.8940	-2.4	2.3
60	3.2501	3.0222	2.8032	-2.5	2.4
61	3.1525	2.9296	2.7156	-2.5	2.4
62	3.0583	2.8403	2.6312	-2.5	2.4
63	2.9674	2.7541	2.5498	-2.6	2.5
64	2.8796	2.6710	2.4713	-2.6	2.5
65	2.7948	2.5907	2.3956	-2.6	2.5
66	2.7129	2.5133	2.3226	-2.7	2.6
67	2.6338	2.4386	2.2522	-2.7	2.6
68	2.5574	2.3664	2.1842	-2.8	2.6
69	2.4835	2.2967	2.1186	-2.8	2.7
70	2.4122	2.2294	2.0553	-2.8	2.7
71	2.3432	2.1644	1.9942	-2.9	2.7
72	2.2765	2.1015	1.9351	-2.9	2.8
73	2.2121	2.0408	1.8781	-2.9	2.8
74	2.1498	1.9822	1.8231	-3.0	2.8
75	2.0895	1.9255	1.7699	-3.0	2.9
76	2.0311	1.8706	1.7185	-3.1	2.9
77	1.9747	1.8176	1.6689	-3.1	2.9
78	1.9201	1.7664	1.6209	-3.1	3.0
79	1.8673	1.7168	1.5745	-3.2	3.0

**R - T TABLE**

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-54151736
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
80	1.8162	1.6688	1.5296	-3.2	3.0
81	1.7667	1.6225	1.4863	-3.3	3.1
82	1.7188	1.5776	1.4443	-3.3	3.1
83	1.6724	1.5341	1.4038	-3.3	3.1
84	1.6274	1.4921	1.3645	-3.4	3.2
85	1.5839	1.4513	1.3266	-3.4	3.2
86	1.5417	1.4119	1.2898	-3.5	3.2
87	1.5009	1.3738	1.2543	-3.5	3.3
88	1.4613	1.3368	1.2199	-3.5	3.3
89	1.4229	1.3010	1.1866	-3.6	3.4
90	1.3857	1.2663	1.1543	-3.6	3.4
91	1.3497	1.2327	1.1231	-3.7	3.4
92	1.3148	1.2002	1.0928	-3.7	3.5
93	1.2809	1.1686	1.0635	-3.7	3.5
94	1.2480	1.1380	1.0351	-3.8	3.5
95	1.2161	1.1084	1.0076	-3.8	3.6
96	1.1852	1.0796	0.9810	-3.9	3.6
97	1.1552	1.0518	0.9552	-3.9	3.6
98	1.1261	1.0247	0.9301	-3.9	3.7
99	1.0979	0.9985	0.9059	-4.0	3.7
100	1.0705	0.9731	0.8823	-4.0	3.8
101	1.0439	0.9484	0.8595	-4.1	3.8
102	1.0180	0.9245	0.8374	-4.1	3.8
103	0.9930	0.9012	0.8159	-4.2	3.9
104	0.9686	0.8787	0.7951	-4.2	3.9
105	0.9450	0.8568	0.7749	-4.2	3.9
106	0.9220	0.8356	0.7553	-4.3	4.0
107	0.8997	0.8149	0.7363	-4.3	4.0
108	0.8780	0.7949	0.7179	-4.4	4.1
109	0.8569	0.7755	0.7000	-4.4	4.1
110	0.8365	0.7566	0.6826	-4.5	4.1
111	0.8166	0.7382	0.6657	-4.5	4.2
112	0.7973	0.7204	0.6493	-4.6	4.2
113	0.7785	0.7031	0.6334	-4.6	4.3
114	0.7602	0.6862	0.6179	-4.6	4.3
115	0.7424	0.6699	0.6029	-4.7	4.3
116	0.7252	0.6540	0.5883	-4.7	4.4
117	0.7084	0.6385	0.5741	-4.8	4.4
118	0.6920	0.6235	0.5604	-4.8	4.5
119	0.6761	0.6089	0.5470	-4.9	4.5

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
120	0.6607	0.5947	0.5340	-4.9	4.5
121	0.6456	0.5809	0.5213	-5.0	4.6
122	0.6310	0.5674	0.5090	-5.0	4.6
123	0.6168	0.5544	0.4971	-5.1	4.7
124	0.6029	0.5417	0.4854	-5.1	4.7
125	0.5894	0.5293	0.4741	-5.2	4.7
126	0.5763	0.5173	0.4631	-5.2	4.8
127	0.5635	0.5056	0.4524	-5.3	4.8
128	0.5510	0.4942	0.4420	-5.3	4.9
129	0.5389	0.4831	0.4319	-5.4	4.9
130	0.5271	0.4723	0.4221	-5.4	4.9
131	0.5156	0.4617	0.4125	-5.4	5.0
132	0.5044	0.4515	0.4032	-5.5	5.0
133	0.4935	0.4415	0.3941	-5.5	5.1
134	0.4828	0.4318	0.3853	-5.6	5.1
135	0.4725	0.4224	0.3767	-5.6	5.2
136	0.4624	0.4132	0.3683	-5.7	5.2
137	0.4525	0.4042	0.3601	-5.7	5.2
138	0.4429	0.3955	0.3522	-5.8	5.3
139	0.4336	0.3869	0.3444	-5.8	5.3
140	0.4245	0.3786	0.3369	-5.9	5.4
141	0.4156	0.3706	0.3296	-5.9	5.4
142	0.4069	0.3627	0.3224	-6.0	5.5
143	0.3985	0.3550	0.3155	-6.0	5.5
144	0.3902	0.3475	0.3087	-6.1	5.5
145	0.3822	0.3402	0.3021	-6.1	5.6
146	0.3744	0.3331	0.2956	-6.2	5.6
147	0.3667	0.3261	0.2893	-6.2	5.7
148	0.3592	0.3194	0.2832	-6.3	5.7
149	0.3520	0.3128	0.2772	-6.4	5.8
150	0.3449	0.3063	0.2714	-6.4	5.8
151	0.3379	0.3000	0.2657	-6.5	5.8
152	0.3311	0.2939	0.2602	-6.5	5.9
153	0.3245	0.2879	0.2548	-6.6	5.9
154	0.3180	0.2820	0.2495	-6.6	6.0
155	0.3117	0.2763	0.2443	-6.7	6.0
156	0.3056	0.2708	0.2393	-6.7	6.1
157	0.2996	0.2653	0.2344	-6.8	6.1
158	0.2937	0.2600	0.2296	-6.8	6.2
159	0.2880	0.2549	0.2250	-6.9	6.2

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝 特 力 材 料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
160	0.2824	0.2498	0.2205	-6.9	6.3
161	0.2769	0.2449	0.2160	-7.0	6.3
162	0.2716	0.2401	0.2117	-7.0	6.3
163	0.2664	0.2354	0.2075	-7.1	6.4
164	0.2613	0.2308	0.2034	-7.1	6.4
165	0.2564	0.2263	0.1993	-7.2	6.5
166	0.2515	0.2220	0.1954	-7.3	6.5
167	0.2468	0.2177	0.1916	-7.3	6.6
168	0.2422	0.2135	0.1878	-7.4	6.6
169	0.2376	0.2095	0.1842	-7.4	6.7
170	0.2332	0.2055	0.1806	-7.5	6.7
171	0.2289	0.2016	0.1771	-7.5	6.8
172	0.2247	0.1978	0.1737	-7.6	6.8
173	0.2205	0.1941	0.1704	-7.6	6.9
174	0.2165	0.1905	0.1672	-7.7	6.9
175	0.2126	0.1869	0.1640	-7.8	7.0
176	0.2087	0.1835	0.1609	-7.8	7.0
177	0.2049	0.1801	0.1579	-7.9	7.0
178	0.2012	0.1768	0.1549	-7.9	7.1
179	0.1976	0.1736	0.1520	-8.0	7.1
180	0.1941	0.1704	0.1492	-8.0	7.2
181	0.1907	0.1673	0.1465	-8.1	7.2
182	0.1873	0.1643	0.1438	-8.2	7.3
183	0.1840	0.1613	0.1411	-8.2	7.3
184	0.1807	0.1584	0.1385	-8.3	7.4
185	0.1776	0.1556	0.1360	-8.3	7.4
186	0.1745	0.1528	0.1336	-8.4	7.5
187	0.1715	0.1501	0.1311	-8.5	7.5
188	0.1685	0.1475	0.1288	-8.5	7.6
189	0.1656	0.1449	0.1265	-8.6	7.6
190	0.1628	0.1424	0.1242	-8.6	7.7
191	0.1600	0.1399	0.1220	-8.7	7.7
192	0.1573	0.1375	0.1199	-8.8	7.8
193	0.1546	0.1351	0.1178	-8.8	7.8
194	0.1520	0.1328	0.1157	-8.9	7.9
195	0.1494	0.1305	0.1137	-8.9	7.9
196	0.1469	0.1283	0.1117	-9.0	8.0
197	0.1445	0.1261	0.1098	-9.1	8.0
198	0.1421	0.1240	0.1079	-9.1	8.1
199	0.1397	0.1219	0.1060	-9.2	8.1

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (KΩ)	Rnor. (KΩ)	Rmin. (KΩ)	Temperature Tol. (°C)	
200	0.1374	0.1198	0.1042	-9.2	8.2
201	0.1352	0.1178	0.1024	-9.3	8.2
202	0.1330	0.1158	0.1007	-9.4	8.3
203	0.1308	0.1139	0.0990	-9.4	8.3
204	0.1287	0.1120	0.0973	-9.5	8.4
205	0.1266	0.1102	0.0957	-9.5	8.4
206	0.1246	0.1084	0.0941	-9.6	8.5
207	0.1226	0.1066	0.0925	-9.7	8.6
208	0.1206	0.1049	0.0910	-9.7	8.6
209	0.1187	0.1032	0.0895	-9.8	8.7
210	0.1168	0.1015	0.0880	-9.9	8.7
211	0.1150	0.0999	0.0865	-9.9	8.8
212	0.1132	0.0983	0.0851	-10.0	8.8
213	0.1114	0.0967	0.0837	-10.0	8.9
214	0.1097	0.0952	0.0824	-10.1	8.9
215	0.1080	0.0937	0.0810	-10.2	9.0
216	0.1063	0.0922	0.0797	-10.2	9.0
217	0.1047	0.0907	0.0785	-10.3	9.1
218	0.1031	0.0893	0.0772	-10.4	9.1
219	0.1015	0.0879	0.0760	-10.4	9.2
220	0.0999	0.0866	0.0748	-10.5	9.2
221	0.0984	0.0852	0.0736	-10.6	9.3
222	0.0969	0.0839	0.0724	-10.6	9.4
223	0.0955	0.0826	0.0713	-10.7	9.4
224	0.0941	0.0814	0.0702	-10.8	9.5
225	0.0926	0.0801	0.0691	-10.8	9.5
226	0.0913	0.0789	0.0680	-10.9	9.6
227	0.0899	0.0777	0.0670	-11.0	9.6
228	0.0886	0.0765	0.0660	-11.0	9.7
229	0.0873	0.0754	0.0649	-11.1	9.7
230	0.0860	0.0743	0.0640	-11.2	9.8
231	0.0848	0.0732	0.0630	-11.2	9.8
232	0.0835	0.0721	0.0620	-11.3	9.9
233	0.0823	0.0710	0.0611	-11.4	10.0
234	0.0811	0.0700	0.0602	-11.4	10.0
235	0.0800	0.0689	0.0593	-11.5	10.1
236	0.0788	0.0679	0.0584	-11.6	10.1
237	0.0777	0.0669	0.0575	-11.6	10.2
238	0.0766	0.0660	0.0567	-11.7	10.2
239	0.0755	0.0650	0.0558	-11.8	10.3

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (KΩ)	Rnor. (KΩ)	Rmin. (KΩ)	Temperature Tol. (°C)	
240	0.0744	0.0641	0.0550	-11.8	10.4
241	0.0734	0.0632	0.0542	-11.9	10.4
242	0.0724	0.0623	0.0534	-12.0	10.5
243	0.0713	0.0614	0.0527	-12.0	10.5
244	0.0704	0.0605	0.0519	-12.1	10.6
245	0.0694	0.0596	0.0511	-12.2	10.6
246	0.0684	0.0588	0.0504	-12.3	10.7
247	0.0675	0.0580	0.0497	-12.3	10.8
248	0.0666	0.0572	0.0490	-12.4	10.8
249	0.0656	0.0564	0.0483	-12.5	10.9
250	0.0648	0.0556	0.0476	-12.5	10.9
251	0.0639	0.0548	0.0469	-12.6	11.0
252	0.0630	0.0541	0.0463	-12.7	11.0
253	0.0622	0.0533	0.0456	-12.8	11.1
254	0.0613	0.0526	0.0450	-12.8	11.2
255	0.0605	0.0519	0.0444	-12.9	11.2
256	0.0597	0.0512	0.0437	-13.0	11.3
257	0.0589	0.0505	0.0431	-13.0	11.3
258	0.0581	0.0498	0.0425	-13.1	11.4
259	0.0574	0.0491	0.0420	-13.2	11.5
260	0.0566	0.0485	0.0414	-13.3	11.5
261	0.0559	0.0478	0.0408	-13.3	11.6
262	0.0552	0.0472	0.0403	-13.4	11.6
263	0.0544	0.0466	0.0397	-13.5	11.7
264	0.0537	0.0460	0.0392	-13.5	11.8
265	0.0530	0.0453	0.0387	-13.6	11.8
266	0.0524	0.0448	0.0382	-13.7	11.9
267	0.0517	0.0442	0.0377	-13.8	11.9
268	0.0510	0.0436	0.0372	-13.8	12.0
269	0.0504	0.0430	0.0367	-13.9	12.1
270	0.0497	0.0425	0.0362	-14.0	12.1
271	0.0491	0.0419	0.0357	-14.1	12.2
272	0.0485	0.0414	0.0352	-14.1	12.2
273	0.0479	0.0409	0.0348	-14.2	12.3
274	0.0473	0.0403	0.0343	-14.3	12.4
275	0.0467	0.0398	0.0339	-14.4	12.4
276	0.0461	0.0393	0.0334	-14.4	12.5
277	0.0456	0.0388	0.0330	-14.5	12.6
278	0.0450	0.0383	0.0326	-14.6	12.6
279	0.0445	0.0379	0.0322	-14.7	12.7

R - T TABLE

PART NO.:DHT0A103J34D2NY

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

R25 =10 KOhm $\pm$ 5%

B25/85= 3435 K $\pm$ 2%

Temperature (°C)	Rmax. (K Ω)	Rnor. (K Ω)	Rmin. (K Ω)	Temperature Tol. (°C)	
280	0.0439	0.0374	0.0318	-14.7	12.7
281	0.0434	0.0369	0.0314	-14.8	12.8
282	0.0428	0.0365	0.0310	-14.9	12.9
283	0.0423	0.0360	0.0306	-15.0	12.9
284	0.0418	0.0356	0.0302	-15.1	13.0
285	0.0413	0.0351	0.0298	-15.1	13.1
286	0.0408	0.0347	0.0295	-15.2	13.1
287	0.0403	0.0343	0.0291	-15.3	13.2
288	0.0399	0.0339	0.0287	-15.4	13.2
289	0.0394	0.0335	0.0284	-15.4	13.3
290	0.0389	0.0331	0.0280	-15.5	13.4
291	0.0385	0.0327	0.0277	-15.6	13.4
292	0.0380	0.0323	0.0273	-15.7	13.5
293	0.0376	0.0319	0.0270	-15.8	13.6
294	0.0371	0.0315	0.0267	-15.8	13.6
295	0.0367	0.0311	0.0264	-15.9	13.7
296	0.0363	0.0308	0.0260	-16.0	13.8
297	0.0359	0.0304	0.0257	-16.1	13.8
298	0.0355	0.0301	0.0254	-16.1	13.9
299	0.0350	0.0297	0.0251	-16.2	13.9
300	0.0346	0.0294	0.0248	-16.3	14.0

RoHS SGS Test Report

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

**Test Report**

No. SH590812/CHEM

Date: 11.30.2005

Page 1 of 2

THINKING (CHANGZHOU) ELECTRONIC CO., LTD
 WUJIN HIGH & NEW-TECH INDUSTRIAL DEVELOPMENT ZONE, CHANGZHOU, JIANGSU, CHINA

The following sample(s) was/were submitted and identified on behalf of the applicant as:

Sample Name : NTC THERMISTOR DHT
 SGS Ref No. : SHEC0051133384-3
 Model : DHT
 Main substance : CERAMIC CHIP/Ag ELECTRODE/GLASS SLEEVE/LEAD WIRE
 Supplier : THINKING (CHANGZHOU) ELECTRONIC CO., LTD

Sample Receiving Date : November 25, 2005

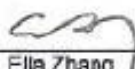
Testing Period : November 25 to November 30, 2005

Test Requested : 1) To determine the Cadmium Content of the submitted sample.
 2) To determine the Lead content of the submitted sample.
 3) To determine Mercury Content of the submitted sample.
 4) To determine Hexavalent Chromium content of the submitted sample.

Test method : 1) With reference to BS EN 1122:2001, Method B or other acid digestion
 Analysis was performed by Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
 2) With reference to US EPA Method 3050B or other acid digestion
 Analysis was performed by Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES) or Atomic Absorption Spectrometry.
 3) With reference to US EPA 3052 or other acid digestion, Analysis was performed by Inductively Coupled Argon Plasma – Atomic Emission Spectrometry (ICP-AES) or US EPA7473 Analysis was performed by Hg Analyzer.
 4) With reference to US EPA3050A and US EPA7196A
 Analysis was performed by UV-VIS Spectrometric method.

Test Results : Please refer to next page

Signed for and on behalf of
 SGS-CSTC Chemical Laboratory


 Ella Zhang
 Supervisor

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.

SGS-CSTC Chemical Laboratory
 Singapore Branch

10/F, 3rd Building, No.889, Yishan Road, Shanghai, China 201223
 中國·上海·宜山路889號3樓10層 郵編201223

Tel: 86-21-61-02668 *2720
 Tel: 86-21-61-02553

Fax: 86-21-54-800314
 Fax: 86-21-54-800314
www.ci.sgs.com
sgs.china@sgs.com

SHCHEM 421618

RoHS SGS Test Report

SGS

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Test Report

No. SH590812/CHEM

Date: 11.30.2005

Page 2 of 2

Test Results

No.	Item	Unit	MDL	A*
1	Cadmium (Cd)	%	0.0002	N.D.
2	Lead (Pb)	%	0.0002	10.65
3	Mercury (Hg)	%	0.0002	N.D.
4	Hexavalent Chromium (Cr VI)	%	0.0002	N.D.

Sample Appearance Description(Photo see appendix):

A. Orange thermistor(mix all)

Note : 0.01%=100ppm

ppm=mg/kg

MDL= Method Detection Limit

N.D.= Not detected.(<MDL)

*The sample(s) was analyzed on behalf of the applicant as mixing whole/part sample in one testing.

The result(s) in report means average of whole sample. The result(s) will be different obviously if the sample(s) was tested as requirement of ROHS, and result(s) may be higher than that of report. The applicant will take the responsibility of all discrepancy and risk.

*** End of Report ***

This Test Report is issued by the Company subject to its General Conditions of Service printed overleaf or attached. Said Conditions are also available upon request or are accessible at www.sgs.com. Attention is drawn to the limitations of liability, indemnification and jurisdictional policies defined therein. The results shown in this Test Report refer only to the sample(s) tested unless otherwise stated and such sample(s) are retained for 90 days only. This Test Report shall not be reproduced except in full, without written approval of the Company.