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**SPECIFICATION FOR APPROVAL**

CUSTOMER _____

CERTIFIED _____

MODEL/TYPE _____

PART NO. _____

INTE103A5C389B (RoHS)

APPLICATION _____

CUSTOMER P/N _____

ISSUE DATE _____

Apr. 14, 2014

REV. NO. _____

REV. DATE _____

FOR CUSTOMER APPROVAL	CHECKED BY
	<i>Shu Ling Fu</i>
	APPROVED BY
	<i>Chun Chu Tu</i>





REVISED RECORD SHEET

REV. NO	REV. DATE	REVISED CONTENT



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Part Number Code

Example :

INT **E** **103** **A** **5** **C** **389** **B**
 (1) (2) (3) (4) (5) (6) (7) (8)

No.	Item	Digit	Specification
(1)	Product Type	INT	Interchangeable NTC Thermistor INT Type
(2)	Series	E	Epoxy Series
(3)	Zero Power Resistance at 25°C (R ₂₅)	103	10 x 10 ³ Ω = 10 KΩ
(4)	Temperature Accuracy Range	A	0 ~ 70°C
(5)	Temperature Tolerance	5	±0.5°C
(6)	Definition of B Value	C	B _{0/50}
(7)	B Value	389	3892K
(8)	Packaging	B	Bulk



Structure and Dimensions

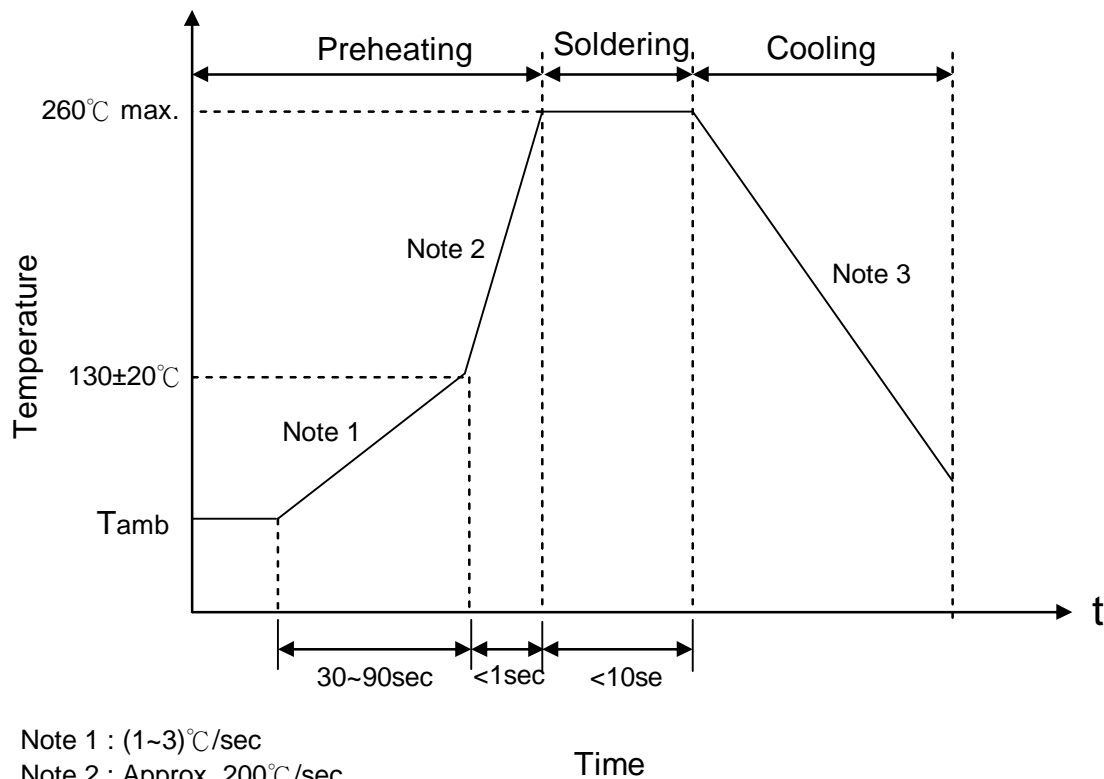
					A. Material List		
					NO.	Item	Discription
					1	Coating Resin	Epoxy
					2	Lead Wire	Cu-Ni Alloy
					*	Element	NTC Thermistor
					B. Element Characteristic		
					Item		Value
					R ₂₅		10KΩ
					B _{0/50}		3892K
					Accuracy		±0.5°C(0°C to 70°C)
					Customer		
					Customer P/N		
					THINKING P/N	INTE103A5C389B	
					DRAWING NO.	INTE103-007	
					DATE	2014/4/3	
1.0	Release to production	W.H. Huang	Miffy Chang	Kenge Lin	THINKING ELECTRONIC INDUSTRIAL CO.,LTD		
REV	SUBJECTS OF CHANGE	DESIGN BY	CHECKED BY	APPROVED BY			

Electrical Characteristics

Part No.	Zero Power Resistance at 25°C	Accuracy of 0°C ~ 70°C	B _{0/50} Value	Operating Temperature Range
	R ₂₅ (KΩ)	(± °C)	(K)	T _L ~ T _U (°C)
INTE103A5C389B	10	0.5	3892	-40 ~+100

Soldering Recommendation

■ Wave Soldering Profile



■ Recommended Reworking Conditions with Soldering Iron

Item	Condition
Temperature of Soldering Iron-tip	360 $^\circ\text{C}$ (max.)
Soldering Time	3 sec (max.)
Distance from Thermistor	2 mm (min.)

Warehouse Storage Conditions of Products

(I) Storage Conditions :

- 1.Storage Temperature : $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
- 2.Relative Humidity : $\leq 75\%RH$
- 3.Keep away from corrosive atmosphere and sunlight

(II) Period of Storage : 1 year

RoHS Compliant Declaration

We hereby declare that the components delivered to your company are compliant with RoHS directive 2011/65/EU.

R - T Table

Part No.:INTE103A5C389B

±0.5°C (+0°C to +70°C)

B0/50=3892K

Temperature (°C)	Resistance Ratio Rt/R ₂₅	α (%/°C)	Rt KΩ
-40	33.441	-6.7148	334.41
-39	31.280	-6.6454	312.80
-38	29.279	-6.5772	292.79
-37	27.425	-6.5115	274.25
-36	25.704	-6.4488	257.04
-35	24.106	-6.3896	241.06
-34	22.620	-6.3339	226.20
-33	21.237	-6.2817	212.37
-32	19.949	-6.2327	199.49
-31	18.748	-6.1867	187.48
-30	17.627	-6.1435	176.27
-29	16.580	-6.1025	165.80
-28	15.602	-6.0635	156.02
-27	14.687	-6.0262	146.87
-26	13.830	-5.9902	138.30
-25	13.029	-5.9553	130.29
-24	12.277	-5.9212	122.77
-23	11.573	-5.8876	115.73
-22	10.914	-5.8545	109.14
-21	10.295	-5.8216	102.95
-20	9.7140	-5.7888	97.140
-19	9.1692	-5.7560	91.692
-18	8.6577	-5.7232	86.577
-17	8.1775	-5.6902	81.775
-16	7.7264	-5.6571	77.264
-15	7.3027	-5.6237	73.027
-14	6.9045	-5.5902	69.045
-13	6.5302	-5.5565	65.302
-12	6.1783	-5.5227	61.783
-11	5.8473	-5.4887	58.473
-10	5.5360	-5.4545	55.360
-9	5.2430	-5.4203	52.430
-8	4.9672	-5.3861	49.672
-7	4.7076	-5.3518	47.076
-6	4.4630	-5.3176	44.630
-5	4.2326	-5.2834	42.326
-4	4.0155	-5.2493	40.155
-3	3.8108	-5.2153	38.108
-2	3.6178	-5.1815	36.178
-1	3.4357	-5.1479	34.357

Temperature (°C)	Resistance Ratio Rt/R ₂₅	α (%/°C)	Rt KΩ
0	3.2650	-5.1063	32.650
1	3.1030	-5.0742	31.030
2	2.9500	-5.0425	29.500
3	2.8054	-5.0111	28.054
4	2.6688	-4.9799	26.688
5	2.5395	-4.9491	25.395
6	2.4173	-4.9185	24.173
7	2.3017	-4.8882	23.017
8	2.1922	-4.8582	21.922
9	2.0886	-4.8285	20.886
10	1.9904	-4.7990	19.904
11	1.8974	-4.7698	18.974
12	1.8093	-4.7409	18.093
13	1.7258	-4.7122	17.258
14	1.6466	-4.6837	16.466
15	1.5715	-4.6555	15.715
16	1.5002	-4.6276	15.002
17	1.4325	-4.5998	14.325
18	1.3683	-4.5723	13.683
19	1.3074	-4.5450	13.074
20	1.2494	-4.5180	12.494
21	1.1944	-4.4912	11.944
22	1.1421	-4.4646	11.421
23	1.0924	-4.4382	10.924
24	1.0451	-4.4120	10.451
25	1.0000	-4.3861	10.000
26	0.95730	-4.3603	9.5730
27	0.91660	-4.3348	9.1660
28	0.87780	-4.3095	8.7780
29	0.84090	-4.2844	8.4090
30	0.80570	-4.2595	8.0570
31	0.77220	-4.2348	7.7220
32	0.74020	-4.2103	7.4020
33	0.70980	-4.1860	7.0980
34	0.68080	-4.1619	6.8080
35	0.65310	-4.1381	6.5310
36	0.62670	-4.1144	6.2670
37	0.60150	-4.0909	6.0150
38	0.57740	-4.0676	5.7740
39	0.55450	-4.0446	5.5450

