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SPECIFICATION FOR APPROVAL

CUSTOMER	C-CUBEE
MODEL NO.	SCK-102
PART NO.	SCK08102MIA
APPLICATION	
CUSTOMER MODEL NO.	6322AQ9189F
DATE	Apr. 26, 2004

FOR CUSTOMER APPROVAL	CHECKED BY
	Ouyang
	APPROVED BY
	Daviewei

Specification of NTC Thermistor for Surge Current Suppression

PART NO . SCK08102MIA

CUSTOMER P/N . 6322AQ9189F

1. Part number code

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Product Code	
SCK	Thinking NTC Thermistor SCK Type

Body Size	
05	ϕ5mm
08	ϕ8mm
10	ϕ10mm
13	ϕ13mm
15	ϕ15mm

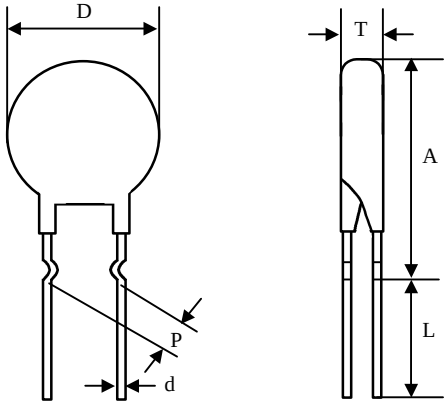
Zero Power Resistance at 25℃(R_{25})	
0R5	0.5Ω
2R5	2.5Ω
08	8Ω
20	20Ω
120	120Ω

Max Steady State Current at 25℃	
X3	0.3A
2X	2.5A
8	8A
10	10A

Tolerance of R_{25}	
L	±15%
M	±20%
N	±25%

Appearance	
S	Straight Lead
I	Inner Kink Lead
F	Y Kink Lead
SC	Straight Cut Lead
:	:

2. Dimensions



(unit:mm)

Disc size	D max.	P nor.	d nor.	A max.	T max.
ϕ 08	9.5	5.0±0.8	0.8±0.02	16	5

2-1 Material of coating : Silicone resin

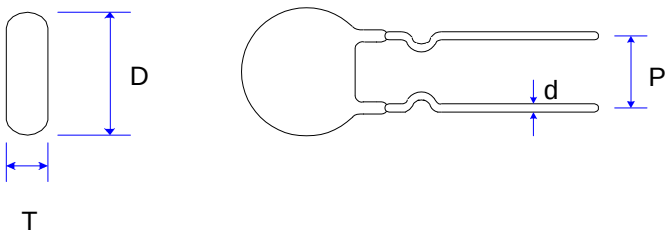
2-2 Material of Leads : Tinned copper wires

2-3 Color of coating : Green

2-4 Print of Marking : SCK 102

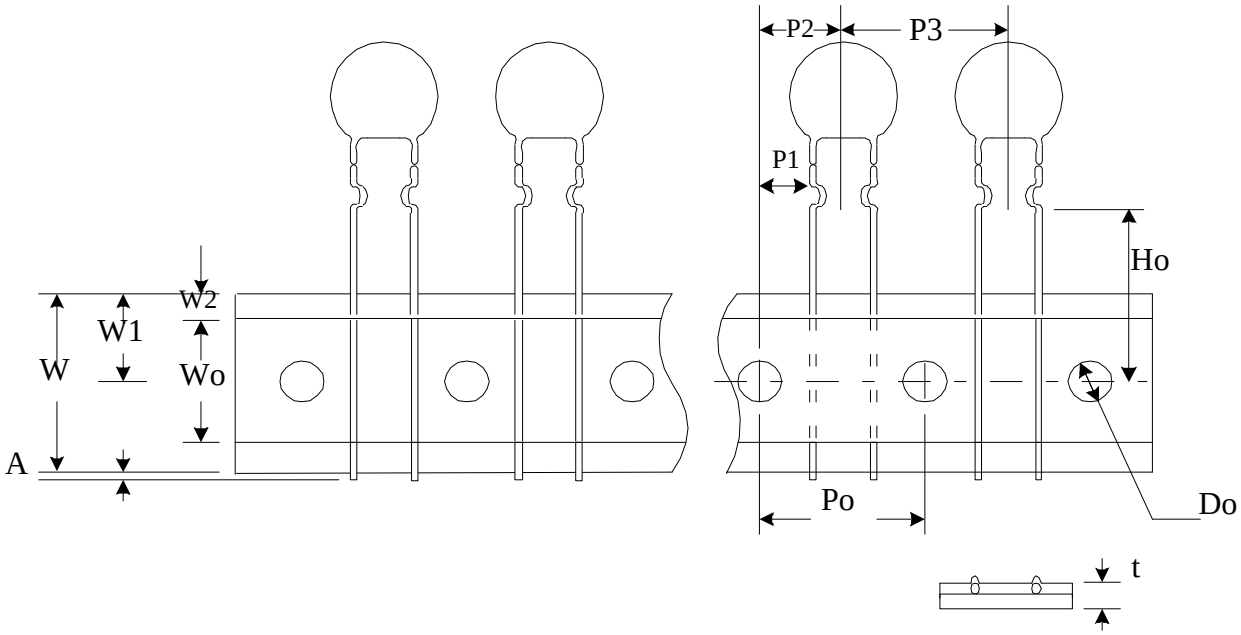
TAPED TYPE

1. Dimensions



ITEM	D	L	d	P	T
MAX.	9.5		0.82	5.8	5
MIN.			0.78	4.2	

(Unit : mm)



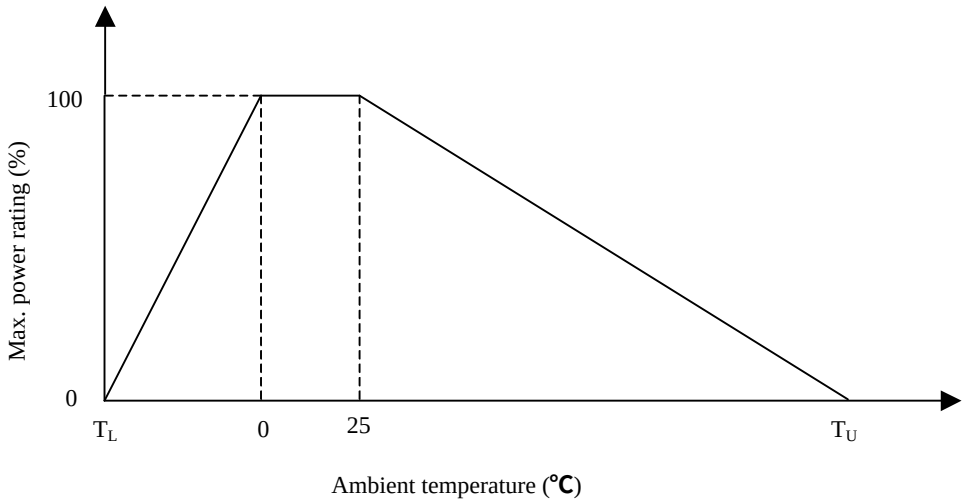
ITEM	Po	P3	P1	P2	Ho	Wo	W1	W2	W	A	Do	t
Nor.	12.7	12.7	3.45	6.35	16	12	9	3	18	1	4	0.6
Tol.	±0.5	±0.5	±0.7	±1.3	±0.5	±1	±0.5	±1	±0.5	Max.	±0.2	±0.2

(Unit : mm)

3. Characteristics

Part no.	Zero power resistance at 25℃ (Ω)	Max. Steady State current at 25℃ (A)	Max. power rating at 25℃ (W)	Thermal dissipation constant (mW/℃)	Thermal time Constant (sec.)	Capacitance at 240Vac (μF)	Operating temperature range (℃)
SCK08102MIA	**10±20%**	2	2.3	16	38	470	-40 ~+170 ℃

4. Maximum power rating (Pmax)



Note: T_L = Minimum Temp. of Operating Temp. Range (℃)

T_U = Maximum Temp. of Operating Temp. Range (℃)

5. Approvals

* UL 1434 recognized (File # E138827)

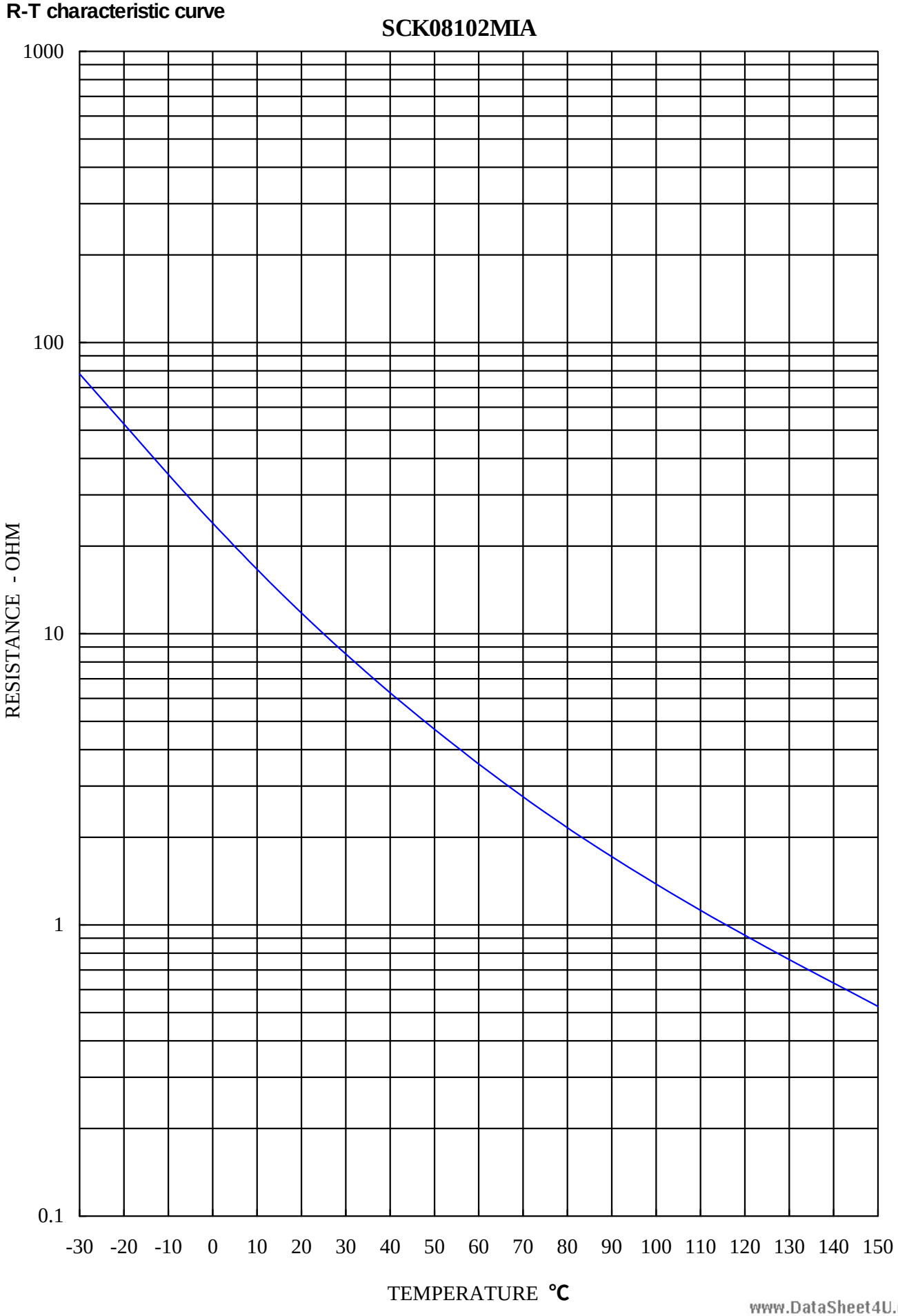
* CSA recognized (File # 97495)

6. Reliability Test

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) / Force (kg) 0.5<d≦0.8 : 1.0 0.8<d≦1.25 : 2.0	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) / Force (kg) 0.5<d≦0.8 : 0.5 0.8<d≦1.25 : 1.0	No visible damage
Solderability	IEC68-2-20	235 ±5℃ , 2 ± 0.5 sec	At least 95% of terminal electrode is covered by new solder
Resistance to Soldering Heat	IEC68-2-20	350 ±5℃ , 3.5 ±0.5 sec	No visible damage | △R/R | ≦ 10 %
High Temperature Storage	IEC68-2-2 UL1434	Tmax ±5℃ x 1000HRS	No visible damage | △R/R | ≦ 20 %
Damp Heat	IEC68-2-3 UL1434	40 ± 2℃ , 9 0 ~ 95 % RH , 1000 ±24 HRS	No visible damage | △R/R | ≦ 20 %
Thermal Shock	IEC68-2-14 UL1434	The thermal shock conditions shown below shall be repeated 5 cycles Step / Temperature (℃) / Period (minutes) 1 / Tmin±5 / 30±3 2 / Room temperature / 5±3 3 / Tmax±5 / 30±3 4 / Room temperature / 5±3	No visible damage | △R/R | ≦ 20 %
Life Test	CNS5550	25 ±5℃, Imax. x 1000 HRS	No visible damage | △R/R | ≦ 20 %
Endurance	UL1434	25 ±5℃,Imax. , C_T , 1min ON / 5 min OFF x1000 cycles C_T=Capacitance at 240Vac	No visible damage | △R/R | ≦ 20 %
Insulation test	MIL-STD-202F-Method 302	1000 V_{DC} 1 min	No visible damage ≧500 MΩ

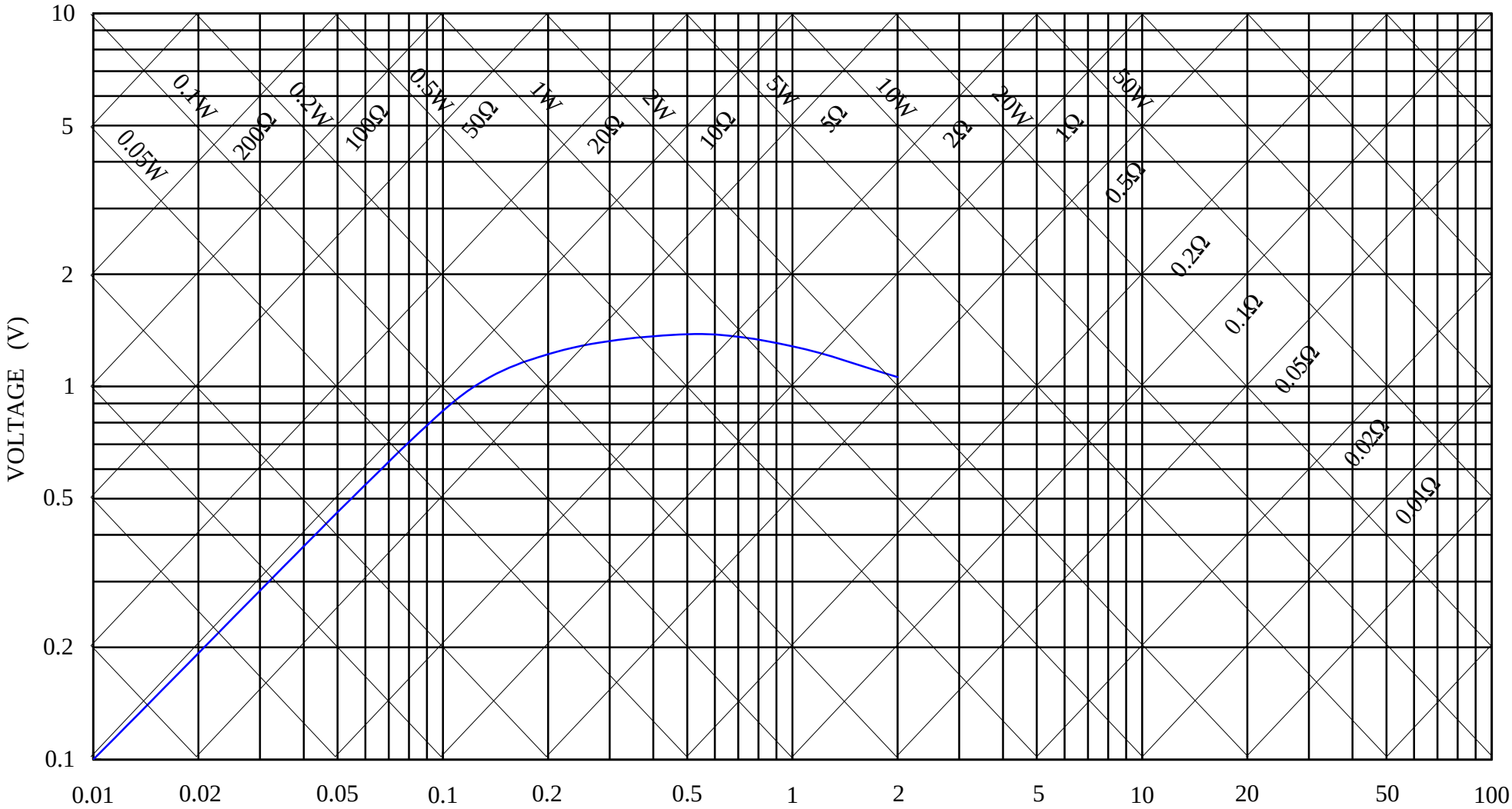
Products have been tested at Thinking Electronic Industrial Co., Ltd. Laboratory recognized by UL (Underwriters Laboratories Inc.) under CTDP (Client Test Data Program).

7. R-T characteristic curve



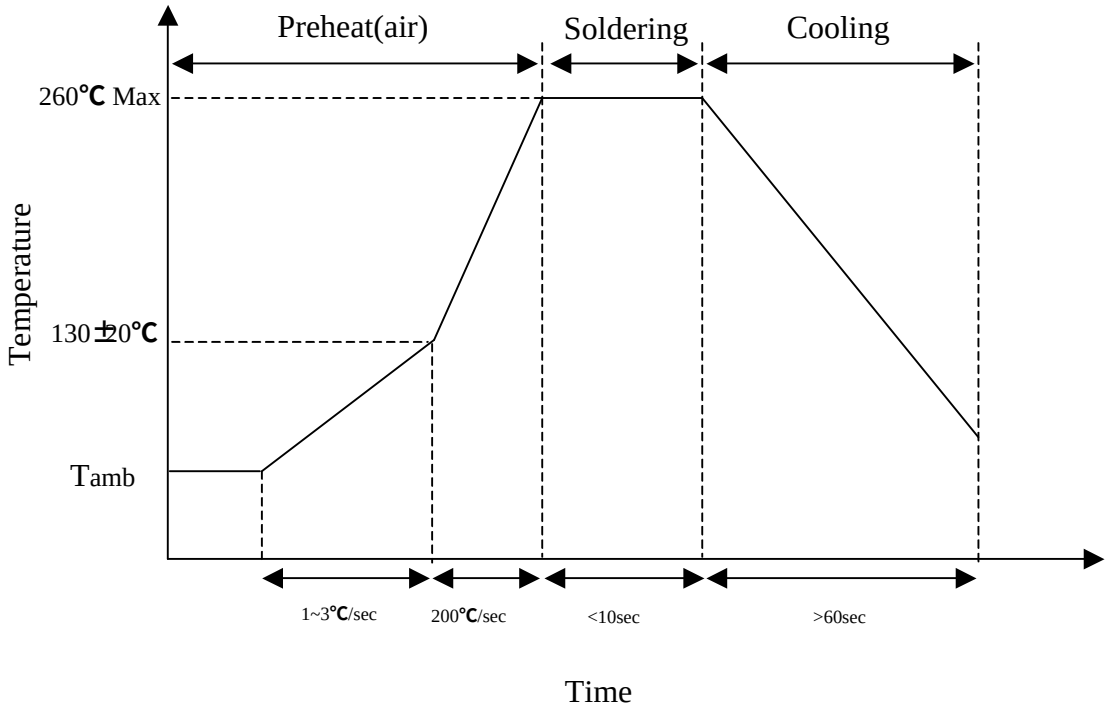
8. V-I characteristic curve (Ambient Ta=25 ℃)

SCK08102MIA



9. Wave Flow

Recommended Wave Soldering Profile



Recommended Reworking Conditions With Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360℃ (max.)
Soldering Time	2 sec (max.)
Distance from coating	**6 mm (min.)**