



THINKING ELECTRONIC INDUSTRIAL CO., LTD.

HEAD OFFICE: 12F, No.93, Dashun 1st Rd., Zuoying Dist., Kaohsiung, Taiwan
TEL: 886-7-5577660 FAX: 886-7-5570560

MANUFACTURING SITE

- KAOHSIUNG FACTORY 1: No. 51, Kaifa Rd., N.E.P.Z, Kaohsiung City 81170, Taiwan
TEL: 886-7-9616668 FAX: 886-7-9616698
- KAOHSIUNG FACTORY 2: No. 2-2, Xinjian S. Rd., N.E.P.Z., Kaohsiung City 81170, Taiwan
TEL: 886-7-9630001 FAX: 886-7-3635113
- CHANGZHOU FACTORY: No.6 Longmen Rd., Wujin High & New-Tech Industrial
Development Zone, Changzhou, Jiangsu, China 213161
TEL:86-519-86578999 FAX:86-519-86558643
- DONG GUAN FACTORY: No.45, East Rd., Sha-Tao Dist., Chang-An Town,
Dongguan City, Guangdong, China 523863
TEL:86-769-85542016 FAX:86-769-85546890
- YICHANG FACTORY: No. 283 Xiaoting Avenue, Xiaoting Dist., Yichang
City 443007, Hubei, China
TEL:86-717-6510010 FAX:86-717-6511430



SPECIFICATION FOR APPROVAL

CUSTOMER	立創電子
CERTIFIED MODEL/TYPE	KRT6000015
PART NO.	KRT6000015SBY (RoHS+HF)
APPLICATION	
CUSTOMER P/N	
ISSUE DATE	Jul.06.2022
REV. NO.	
REV. DATE	

FOR CUSTOMER APPROVAL	CHECKED BY
	<i>Haili Gong</i>
	APPROVED BY
	<i>Huaifang Zhang</i>





REVISED RECORD SHEET

REV. NO	REV. DATE	REVISED CONTENT



INDEX	Page
■ Part Number Code	1
■ Structure and Dimensions	2
■ Electrical Characteristics	2
■ Reliability	3
■ Soldering Recommendation	4
■ Typical Time-to-Trip Curves at 23°C	5
■ Thermal Derating Curve	5
■ RoHS Compliant Declaration	6
■ Warehouse Storage Conditions of Products	6
■ Safety Approvals	7
■ Certificates	7



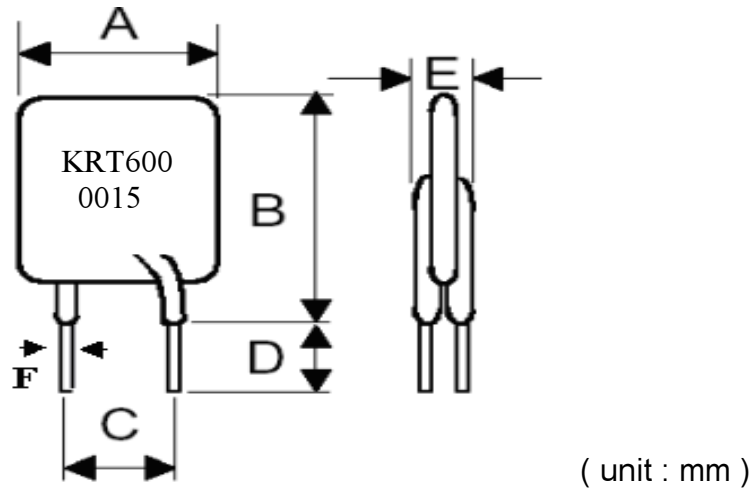
Part Number Code

Example :

K **R** **T** **600** **0015** **S** **B** **Y**
(1) (2) (3) (4) (5) (6) (7) (8)

No.	Item	Digit	Specification
(1)	Product Type	K	Thinking Polymer PTC Resettable Fuse
(2)	Form Factor	R	Radial series
(3)	Usage	T	Telecom
(4)	Vmax. Interrupt	600	600 V
(5)	I hold	0015	0.15A @ 23°C
(6)	Appearance	S	Straight Lead
(7)	Packaging	B	Bulk
(8)	Optional Suffix	Y	RoHS +HF compliance

Structure and Dimensions



A	B	C typ.	D	E	F typ.
7.6~9.0	7.9~12.5	5.0±0.8	4.7~8.7	3.5~5.2	0.60±0.02

Electrical Characteristics (23 °C)

Part No.	V max Interrupt	V max Operating	I max.	I hold @ 23°C	I trip @ 23°C	Pd (max.)
	(V)	(V)	(A)	(A)	(A)	(W)
KRT6000015SBY	600	250	3.0	0.15	0.30	1.00

Part No.	Max.time to trip		Resistance (Ω)		Operating / storage temperature
			Initial (Ri)	Post trip (R1)	
	(A)	(Sec.)	min.	max.	(°C)
KRT6000015SBY	1.00	4.0	6.00	17.0	-40 ~ +85

I_{hold}=Hold current :maximum current device will pass without interruption at 23°C still air unless otherwise specified.

I_{trip}=Trip current :minimum current that will switch the device from low resistance to high resistance at 23°C still air unless otherwise specified.

V_{max Operating} =Maximum voltage device can withstand without damage at rated current.

V_{max Interrupt}=Maximum interrupt voltage device can withstand for short period of time.

I_{max}=Maximum current device can withstand without damage at rated voltage .

P_d=Power dissipated from device while the tripped state at 23°C still air unless otherwise specified.

R_{imin}=Minimum resistance of device prior to tripping at 23°C .

R_{imax}=Maximum resistance of device prior to tripping at 23°C .

R_{1max}=Maximum resistance of the device one hour after tripping at 23°C .

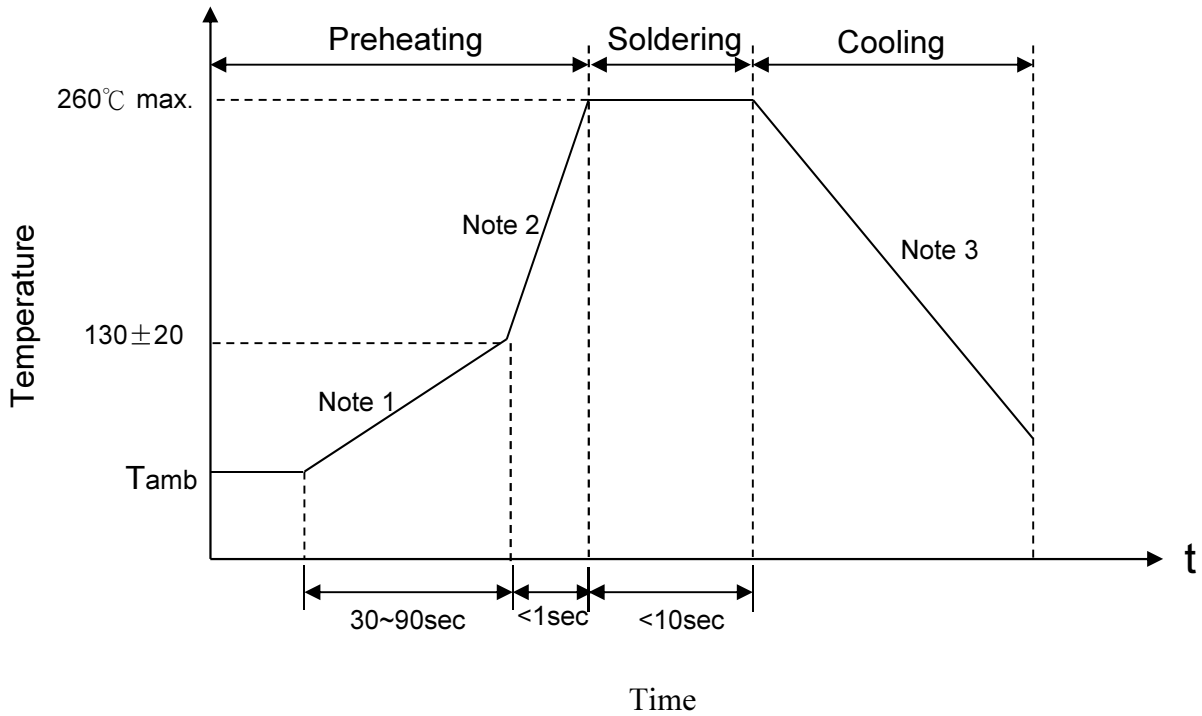
Caution:Operation beyond the specified rating or improper use may result in damage and possible arcing and flame.

Reliability

Item	Standard	Test conditions/Methods	Specifications
Passive Aging	IEC60738-1	85±5°C, 1000±24hrs	±5% typical resistance change
Humidity Aging	IEC60068-2-78	85±5°C, 80~85%RH, 1000±5hrs	±5% typical resistance change
Rapid Change of Temperature	IEC60738-1	85±5/-40±5°C, 10 cycles, Duration:30min	±5% typical resistance change
Overload Endurance	UL 1434	Vmax, 120% Imax ,50 cycles + Vmax, 300% Itrip ,6000 cycles	No arcing or burning
Aging	UL 1434	Vmax, Itrip ≤ I ≤ Imax , 1000±24hrs	No arcing or burning
Resistance to Soldering Heat	IEC60068-2-58	260 ± 5 °C , 10 ± 1 sec	Rf < R1max No visible damage

Soldering Recommendation

Wave Soldering Profile

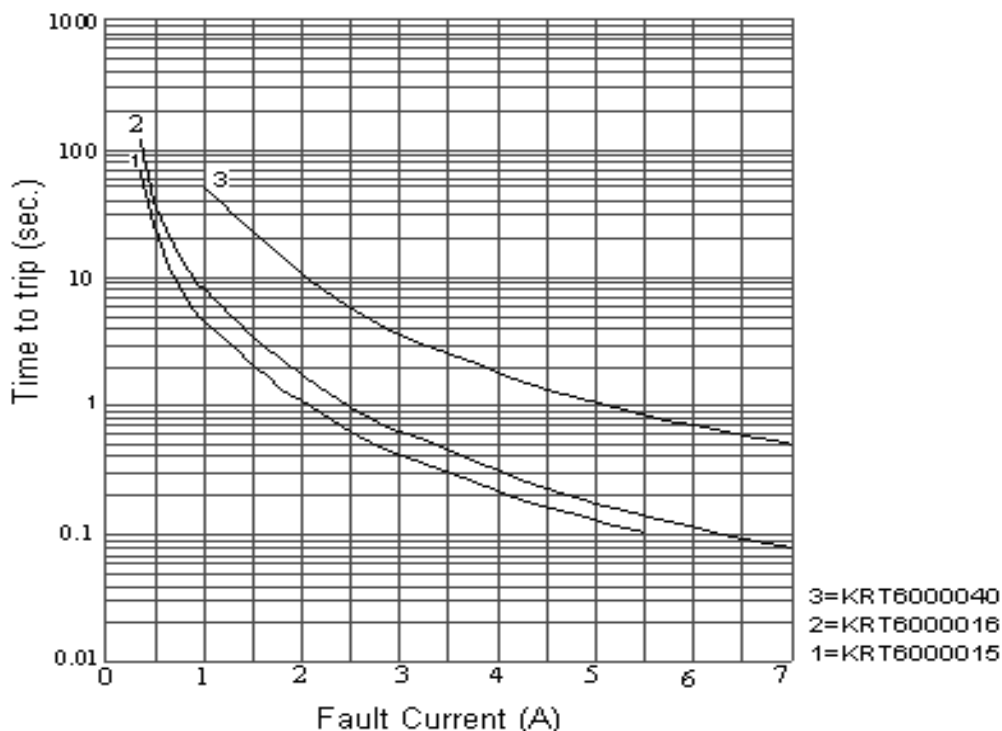


- Note 1 : (1~3)°C/sec
- Note 2 : Approx. 200°C/sec
- Note 3 : 5°C/sec Max

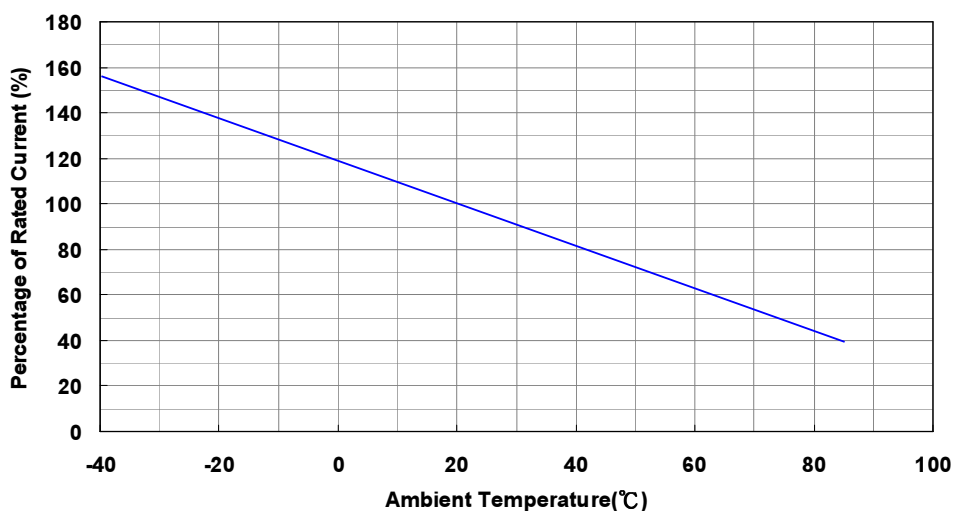
Recommended Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec (max.)
Distance from Thermistor	2 mm (min.)

Typical Time to Trip Curve at 23 °C



Thermal Derating Curve



Model	Ambient Operation Temperature KRT (°C -- A)								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
KRT6000015	0.24	0.21	0.18	0.15	0.12	0.105	0.0915	0.078	0.06

RoHS Compliant Declaration

We hereby declare that the components delivered to your company are compliant with RoHS directive 2015/863/EU.

Warehouse Storage Conditions of Products

(I) Storage Conditions :

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

(II) Period of Storage : 1 year

Safety Approvals (Certified Model/Type : KRT6000015)

* UL 1434 / cUL recognized (File # E138827)



* TUV recognized (File #R50285055)



* CQC recognized (FileNo.CQC13001098048)

Certificates

- (1) IATF 16949 certificate
- (2) ISO 9001 certificate

Test Report

- (1) RoHS test report
- (2) Halogen-free test report