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SPECIFICATION FOR APPROVAL

CUSTOMER	IBS ELECTRONICS
CERTIFIED	
MODEL/TYPE	KRG0300135
PART NO.	KRG0300135IBY (RoHS+HF)
APPLICATION	
CUSTOMER P/N	
ISSUE DATE	Oct.18.2021
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



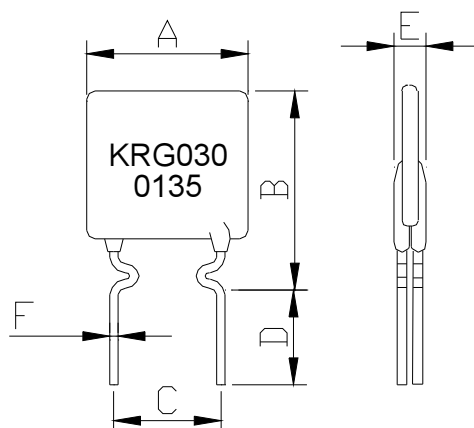
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Part Number Code

Example :

K **R** **G** **030** **0135** **I** **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	G	General
(4)	Vmax. Operation	030	30 V
(5)	I hold	0135	1.35A @ 23°C
(6)	Appearance	I	Inner Kink Lead
(7)	Packaging	B	Bulk
(8)	Optional Suffix	Y	RoHS+HF compliance

Structure and Dimensions

(unit : mm)

A	B	C	D	E	F
8.0~8.9	11.6~13.5	5±0.8	7.6~11.6	1.7~3.0	0.5±0.02

Electrical Characteristics (23 ℃)

Part No.	V max.	I max.	I hold @ 23℃	I trip @ 23℃	Pd (max.)
	(V)	(A)	(A)	(A)	(W)
KRG0300135IBY	30	40	1.35	2.70	0.80

Part No.	Max.time to trip		Resistance (Ω)		Operating / storage temperature
			Initial (Ri)	Post trip (R1)	
	(A)	(Sec.)	min.	max.	(℃)
KRG0300135IBY	6.75	7.3	0.040	0.130	-40 ~ +85

Ihold=Hold current :maximum current device will pass without interruption at 23℃ still air unless otherwise specified.

Itrip=Trip current :minimum current that will switch the device from low resistance to high resistance at 23℃ still air unless otherwise specified.

Vmax=Maximum voltage device can withstand without damage at rated current.

Imax=Maximum current device can withstand without damage at rated voltage .

Pd=Power dissipated from device while the tripped state at 23℃ still air unless otherwise specified.

Rimin=Minimum resistance of device prior to tripping at 23℃ .

Rimax=Maximum resistance of device prior to tripping at 23℃ .

R1max=Maximum resistance of the device one hour after tripping at 23℃ .

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

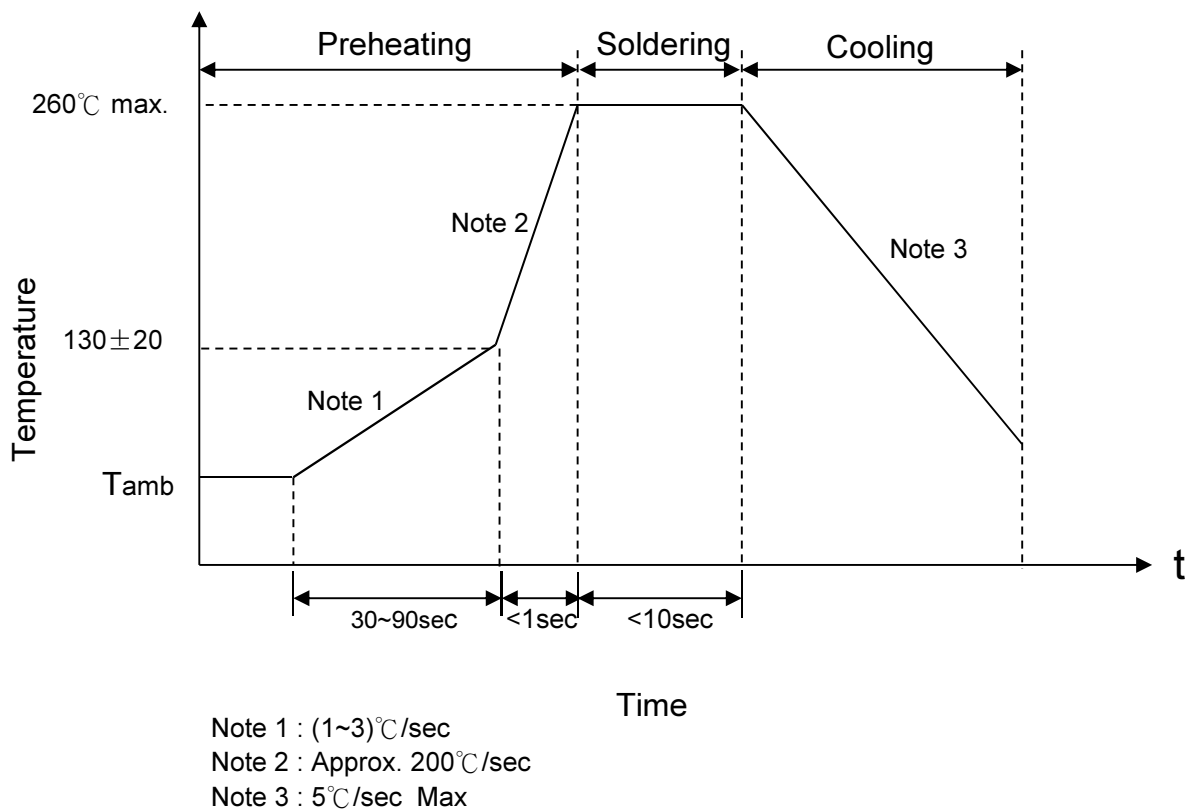


Reliability

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

Soldering Recommendation

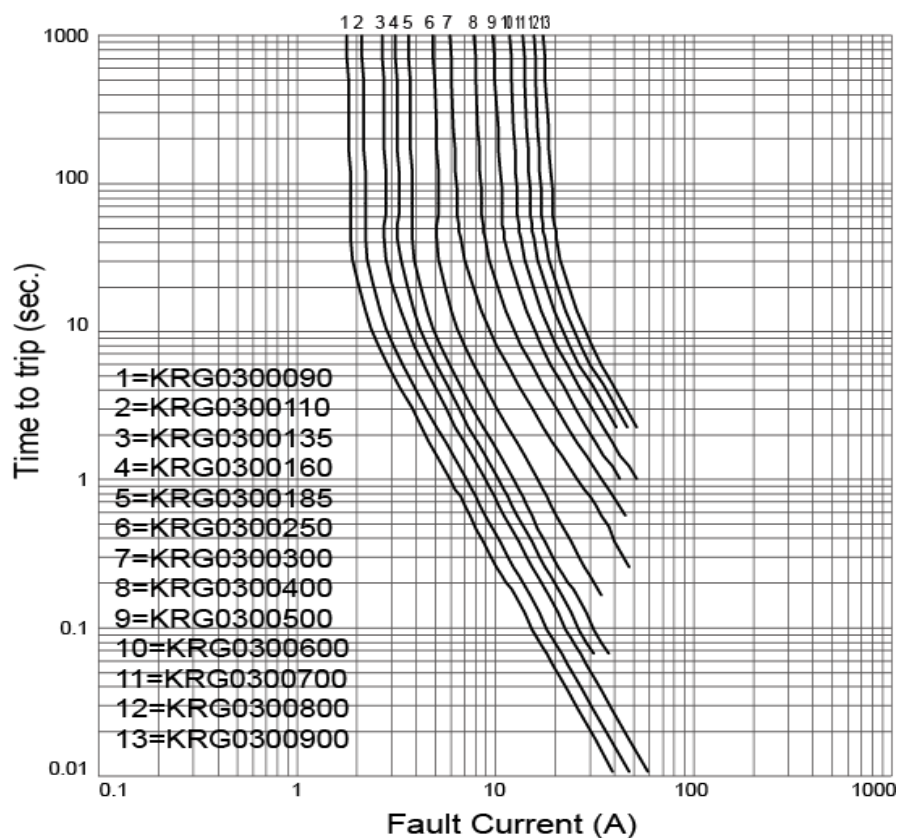
Wave Soldering Profile



Recommended Reworking Conditions with Soldering Iron

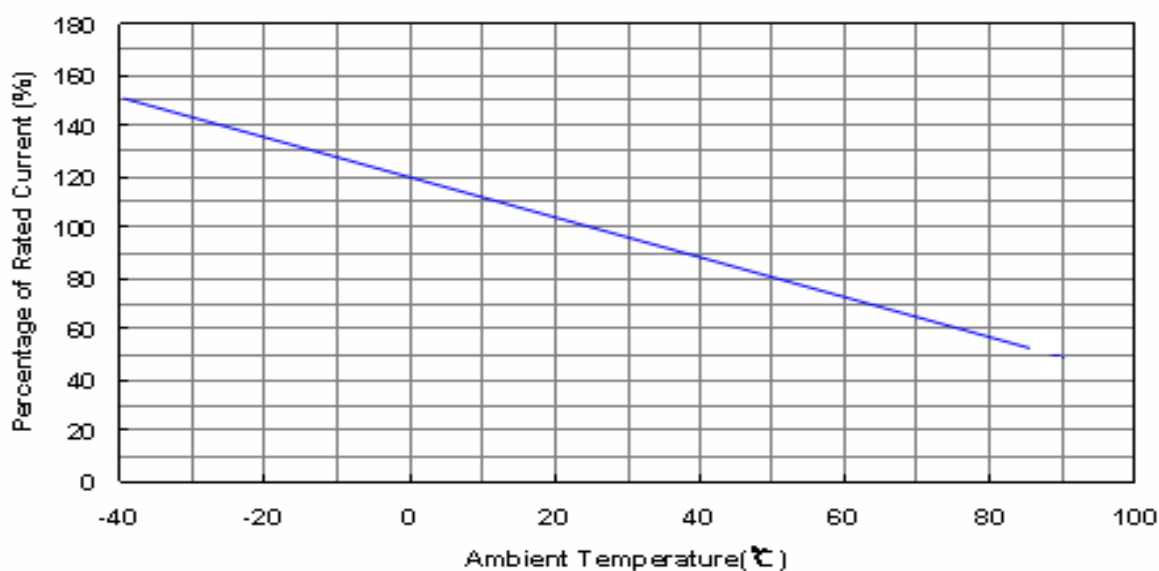
Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec (max.)
Distance from Thermistor	2 mm (min.)

Typical Time-to-Trip Curves at 23 °C



Thermal Derating Curve

Derating Curve for KRG030 Series



Model	Ambient Operation Temperature KRG030								
	-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
KRG0300135	2.07	1.84	1.62	1.35	1.17	1.05	0.92	0.82	0.68

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 : KRG0300135)

* UL 1434 / cUL recognized (File # E138827)



* TUV recognized (File # R50285055)

Certificates

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

Test Report

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