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## SPECIFICATION FOR APPROVAL

CUSTOMER	立創電子
CERTIFIED MODEL/TYPE	KLM2S175
PART NO.	KLM2S175RY(RoHS+HF)
APPLICATION	
CUSTOMER P/N	
ISSUE DATE	Dec.01.2020
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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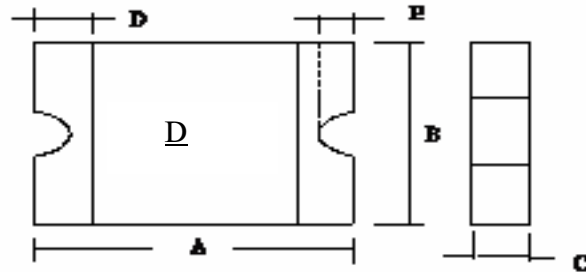
Part Number Code

Example :

**K**      **LM**      **2**      **S**      **175**      **R**      **Y**  
(1)      (2)      (3)      (4)      (5)      (6)      (7)

No.	Item	Digit	Specification
(1)	Product Type	K	Thinking Polymer PTC Resettable Fuse
(2)	Type Series	LM	LoRho SMD series
(3)	Size (EIA)	2	0805
(4)	Structure	S	S type
(5)	I hold	175	1.75A @ 23°C
(6)	Packaging	R	Taping & Reel
(7)	Optional Suffix	Y	RoHS+HF compliance

## Structure and Dimensions



( unit : mm )

Item	A	B	C	D	E
MIN.	2.00	1.20	0.50	0.15	0.05
MAX.	2.20	1.50	0.88	0.55	0.45

## Electrical Characteristics (23 °C)

Part No.	V max.	I max.	I hold @ 23°C	I trip @ 23°C	Pd (Max.)
	(V)	(A)	(A)	(A)	(W)
KLM2S175RY	6	50	1.75	3.50	0.60

Part No.	Max.time to trip		Resistance (Ω)		Operating / storage temperature
			Initial (Ri)	Post trip (R1)	
	(A)	(Sec.)	min.	max.	(°C)
KLM2S175RY	8.0	0.60	0.005	0.055	-40 ~ +85

I<sub>hold</sub>=Hold current :maximum current device will pass without interruption at 23°C still air unless otherwise specified.

I<sub>trip</sub>=Trip current :minimum current that will switch the device from low resistance to high resistance at 23°C still air unless otherwise specified.

V<sub>max</sub>=Maximum voltage device can withstand without damage at rated current.

I<sub>max</sub>=Maximum current device can withstand without damage at rated voltage .

P<sub>d</sub>=Power dissipated from device while the tripped state at 23°C still air unless otherwise specified.

R<sub>imin</sub>=Minimum resistance of device prior to tripping at 23°C .

R<sub>1max</sub>=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.**

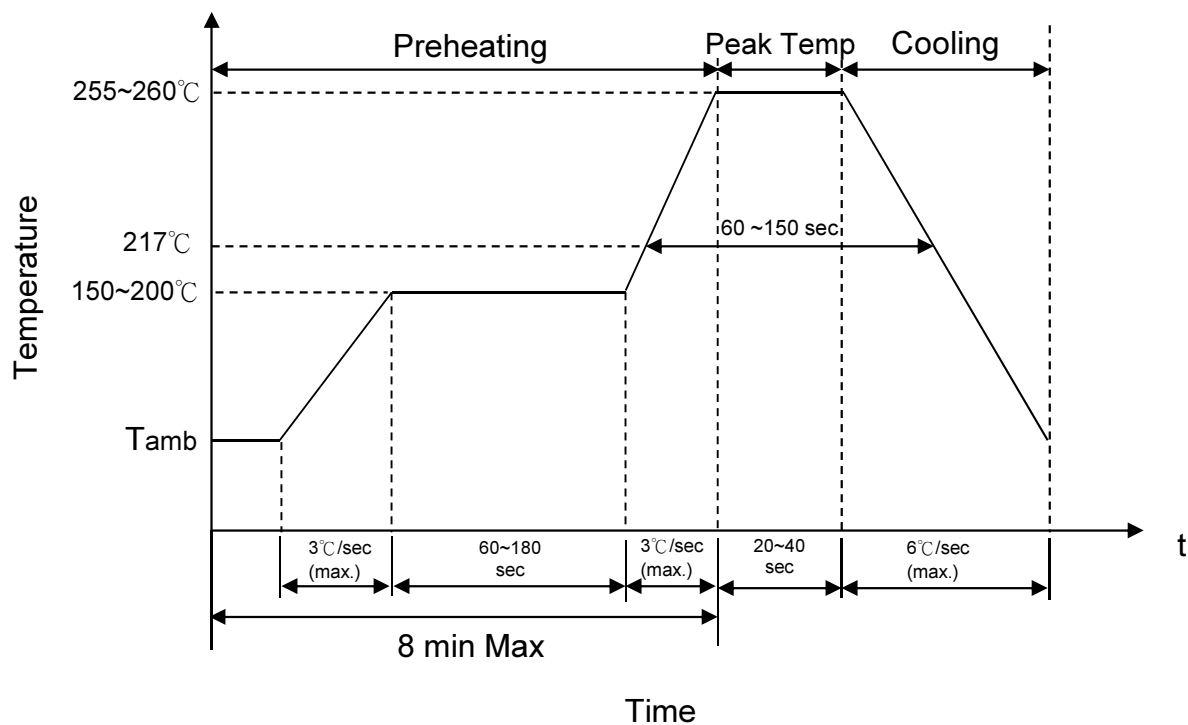


Reliability

Item	Standard	Test conditions/Methods	Specifications
Passive Aging	IEC60738-1	85±5°C, 1000±24hrs	±10% typical resistance change
Humidity Aging	Specification Standard	85±5°C, 80~85%RH, 100±5hrs	±15% typical resistance change
Rapid Change of Temperature	IEC60738-1	85±5/-40±5°C, 20 cycles Duration:30min	-30% typical resistance change
Overload Endurance	UL1434	Vmax,120% I <sub>max</sub> ,50 cycles + Vmax,300% I <sub>trip</sub> ,6000 cycles	No arcing or burring
Aging	UL1434	Vmax, I <sub>trip</sub> ≤ I ≤ I <sub>max</sub> , 1000±24hrs	No arcing or burring
Solderability	IEC60068-2-58	245 ± 5 °C , 3 ± 0.3 sec	At least 95% of terminal electrode is covered by new solder

## Soldering Recommendation

### ■ IR-Reflow Soldering Profile

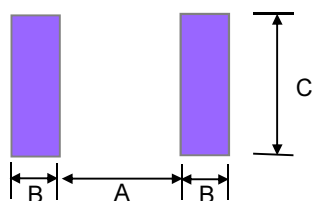


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### ■ Recommended Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360 °C (max.)
Soldering Time	3 sec (max.)
Diameter of Soldering Iron-tip	φ 3 mm (max.)

### ■ Recommended Soldering Pad Dimensions (Nominal)

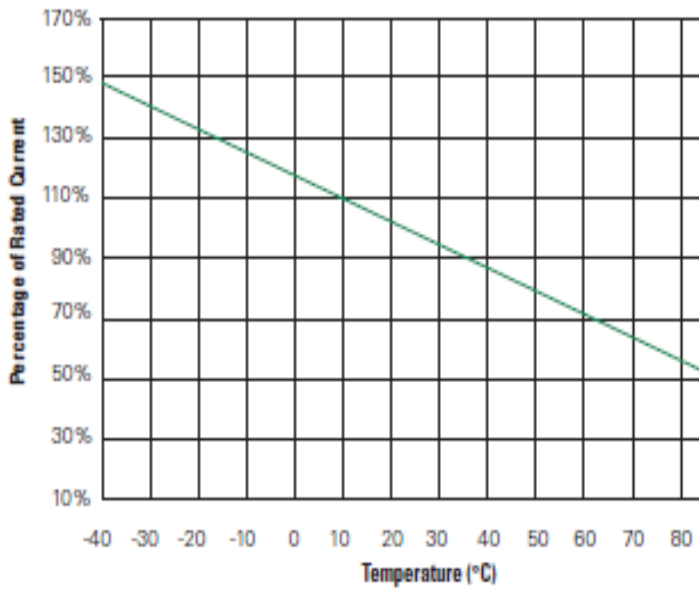


(Unit : mm)

SIZE	A	B	C
0805	1.20	1.00	1.50

Thermal Derating Curve

Thermal derating curve for KLM series (Ihold)



Model	Ambient Operation Temperature							
	-40°C	-20°C	0°C	23°C	40°C	60°C	70°C	85°C
KLM2S175	2.570	2.330	2.070	1.750	1.490	1.240	1.000	0.910



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### 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 :  $\leq 75\%RH$
- 3.Keep away from corrosive atmosphere and sunlight.

(II) Period of Storage : 1 year



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Safety Approvals (Certified Model/Type :KLM2S175)



\* UL 1434 / cUL recognized (File # E138827)



\* TUV recognized (File # R50311748)

Certificates

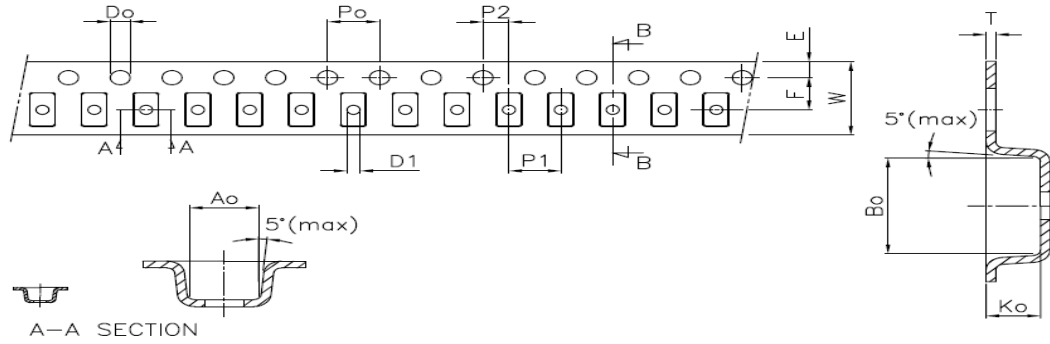
- (1) IATF 16949 certificate
- (2) ISO 9001 certificate

Test Report

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

Packaging

■ Taping specification (0805 type)



INDEX type	A0	B0	K0	P0	P1	P2	T	E	F	D0	D1	W	10P0
Tape-0805-1	1.60 ±0.1	2.30 ±0.1	0.90 ±0.05	4.00 ±0.08	4.00 ±0.1	2.00 ±0.05	0.25 ±0.10	1.75 ±0.1	3.50 ±0.05	1.55 ±0.05	1.00 Min	8.00 ±0.10	40.00 ±0.20

Unit : mm

■ Quantity ( 4000 pcs / reel )

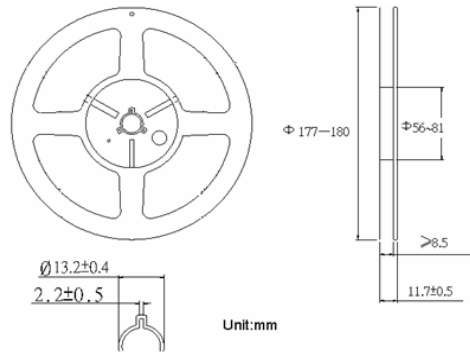


图1