

**Performance Specification**

Model	I <sub>hold</sub>	I <sub>trip</sub>	V <sub>max</sub>	V <sub>max</sub>	I <sub>max</sub>	P <sub>d</sub>	Maximum Time		Resistance		
			Operating	Interrupt			To Trip		R <sub>i min.</sub>	R <sub>i max.</sub>	R <sub>1 max.</sub>
	(mA)	(mA)	(Vdc)	(Vrms)	(A)	Typ.	Current	Time	(Ω)	(Ω)	(Ω)
JK250-020U	20	45	60	250	3	1.00	0.5	0.4	70	160	240
JK250-030U	30	65	60	250	3	1.00	0.5	0.5	50	120	180
JK250-040U	40	80	60	250	3	1.00	0.5	1.0	30	60	100
JK250-060U	60	120	60	250	3	1.00	0.5	0.5	20	60	90
JK250-080U	80	160	60	250	3	1.00	1.00	0.4	12	22	33
JK250-090U	90	180	60	250	3	1.00	1.00	0.5	10	20	31
JK250-100U	100	200	60	250	3	1.00	1.00	1.0	10	12	20
JK250-110U	110	220	60	250	3	1.00	1.00	1.2	6.0	12	16
JK250-120U	120	240	60	250	3	1.00	1.00	1.2	6.0	12	16
JK250-145U	145	290	60	250	3	1.00	1.00	4	3.5	6.5	14
JK250-180T	180	650	60	250	10	1.00	1.00	1.5	1.0	2.2	4.0
JK250-180U	180	650	60	250	10	1.00	3.00	1.5	2.0	4.0	6.0
JK250-200U	200	400	60	250	10	1.00	3.00	5.0	3.0	6.0	9.0
JK250-400U	400	800	60	250	10	1.00	3.00	8.0	1.0	3.0	6.0
JK250-600U	600	1200	60	250	10	1.00	3.00	12.0	0.6	1.7	4.5
JK250-800U	800	1600	60	250	10	1.50	5.00	18.0	0.4	1.0	3.0
JK250-1000U	1000	2000	60	250	10	1.50	5.00	20.0	0.3	0.8	2.5
JK250-1200U	1200	2400	60	250	10	1.50	6.00	20.0	0.2	0.8	2.5
JK250-1500U	1500	3000	60	250	10	1.50	7.50	20.0	0.2	0.6	2.0
JK250-2000U	2000	4000	60	250	10	1.50	10.00	20.0	0.2	0.4	1.5

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

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

I<sub>hold</sub> = Hold Current. Maximum current device will not trip in 25°C still air.

I<sub>trip</sub> = Trip Current. Minimum current at which the device will always trip in 25°C still air.

P<sub>d</sub> = Power dissipation when device is in the tripped state in 25°C still air environment at rated voltage.

R<sub>i min./max</sub> = Minimum/Maximum device resistance prior to tripping at 25°C.

R<sub>1max</sub> = Maximum device resistance is measured one hour post reflow.

CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.

## Physical Dimensions(mm.)

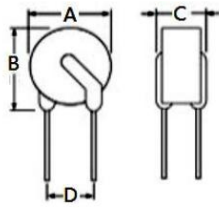


Fig.1

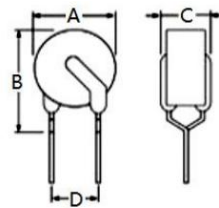


Fig.2

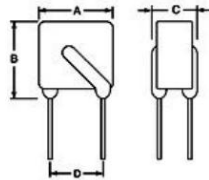


Fig.3

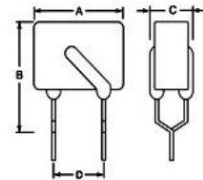


Fig.4

Model	Dimensions (mm)				Lead material	Shape
	A(max)	B(max)	C(max)	D(typ)	Tinned metal(mm)	Fig
JK250-020U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1
JK250-030U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1
JK250-040U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
JK250-050U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
JK250-060U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
JK250-080U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	2
JK250-090U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	2
JK250-100U	7.8	12.6	4.5	5.1	22AWG/Φ0.6	1
JK250-110U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
JK250-120U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
JK250-145U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
JK250-180T	10.2	14.5	3.8	5.1	22AWG/Φ0.6	2
JK250-180U	9.0	11.0	4.5	5.1	22AWG/Φ0.6	4
JK250-200U	12.0	17.0	4.5	5.1	22AWG/Φ0.6	3
JK250-400U	12.0	17.0	4.5	5.1	22AWG/Φ0.6	3
JK250-600U	16.0	18.0	4.5	5.1	22AWG/Φ0.6	3
JK250-800U	20.0	22.5	4.5	5.1	20 AWG/Φ0.8	3
JK250-1000U	20	22.5	4.5	5.1	20 AWG/Φ0.8	3
JK250-1200U	22	28	4.5	5.1	20 AWG/Φ0.8	3
JK250-1500U	25	30	4.5	5.1	20 AWG/Φ0.8	3
JK250-2000U	26	32	4.5	10.2	20 AWG/Φ0.8	3

Unit : mm

 Note: Dimensions in the A, B, C are the maximum sizes, all typical values of D is at the tolerance of  $\pm 0.75\text{mm}$ .



### Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85°C, 1000 hrs.	±5% typical
Humidity aging	+85°C, 85% R.H. , 168 hours	±5% typical
Thermal shock	+85°C to -40°C, 20 times	±33% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change

Ambient operating conditions : - 40 °C to +85 °C

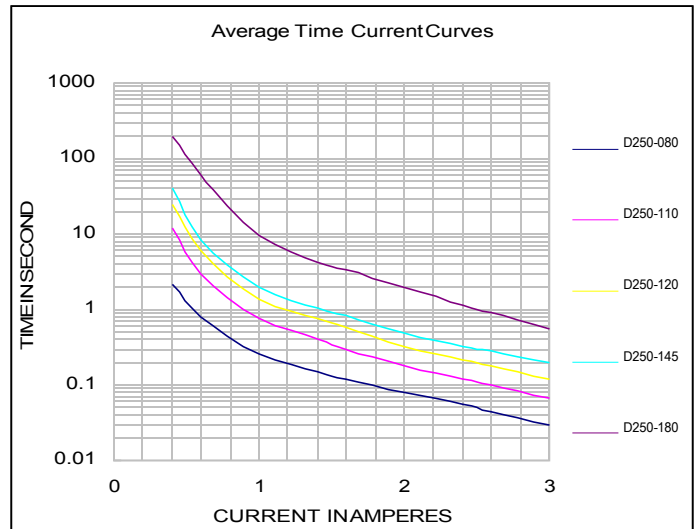
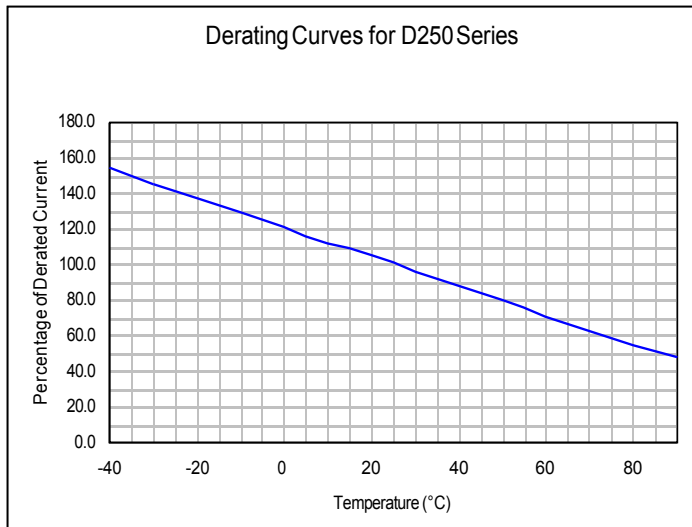
Maximum surface temperature of the device in the tripped state is 125 °C

### Agency Approval and Environmental Compliance

Agency	File Number	Regulation	Standard
UL	pending		2002/95/EC
TUV	pending		R50077227

## Thermal Derating Curve

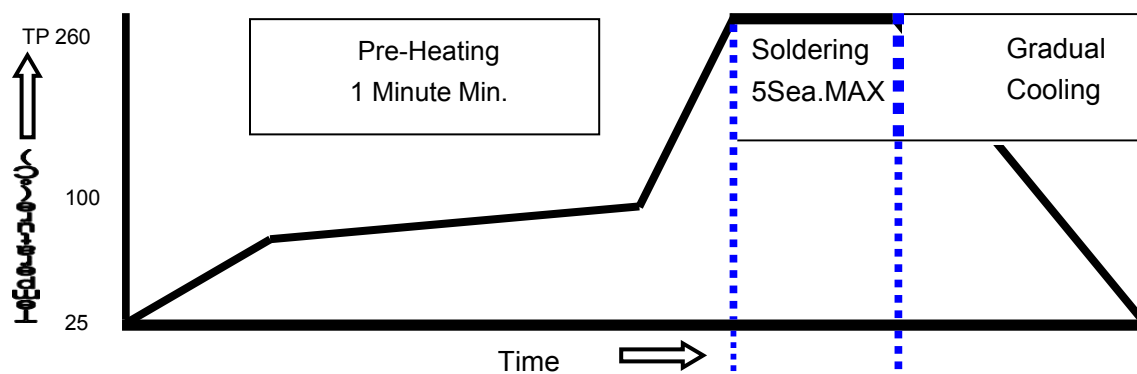
## Average Time-Current Curve



## I<sub>hold</sub> Versus Temperature

Model	Maximum ambient operating temperature (°C)									
	-40°C	-20°C	0°C	25°C	30°C	40°C	50°C	60°C	70°C	85°C
JK250 series	148%	132%	117%	100%	91%	85%	77%	68%	61%	45%

## Soldering Parameters

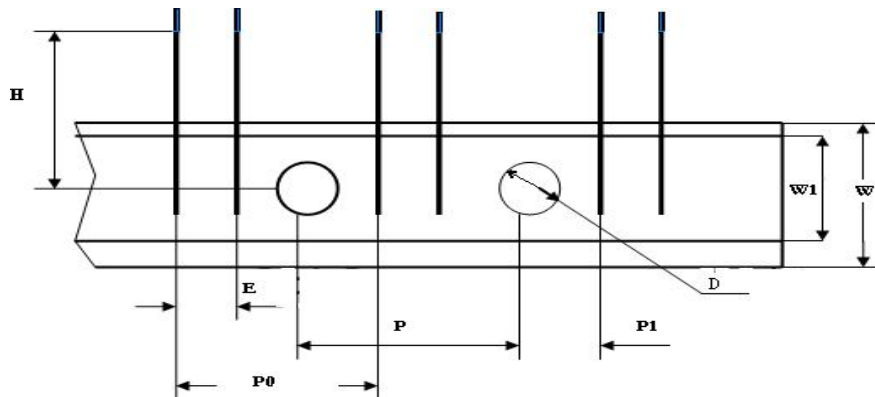


### WAVE SOLDERING INFORMATIONS

Pre-Heating Zone	Max. ramping rate should not exceed 4°C/Sec.
Soldering Zone	Max. solder temperature should not exceed 260°C
Cooling Zone	Cooling by natural convection in air.

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## Packaging Quantity



E	P	P0	P1	W1	w	H	D
5.0±0.5mm	12.7±1mm	12.7±1mm	3.85±0.7mm	12 (min)	18±1mm	16.5±1.0mm	4.0±0.5mm

Package Qty: 1000PCS/small box, 10 boxes/Carton

Small Box Dim: 330 (±4) mm×245 (±3) mm×43 (±2) mm

Carton Dim: 500 (±5) mm×350 (±4) mm×265 (±3) mm

JK250	120	U	Reel Q'ty	Bag Q'ty
Product	Hold	T= Pre-tripped	1000PCS	1000PCS
name	Current	U= Uncoated		
250V	(mA)	Blank= Standard		

Tape & Reel packaging per EIA468-B standard.

## Warehouse Storage Conditions of Product s

(1) Storage Conditions :

- a.Storage Temperature : -10℃~+40℃
- b.Relative Humidity : ≅75%RH
- c. Keep away from corrosive atmosphere and sunlight.

(2) Period of Storage : 1 year

Website: <http://www.jksemit.com>

For additional information, please contact your local Sales Representative.

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