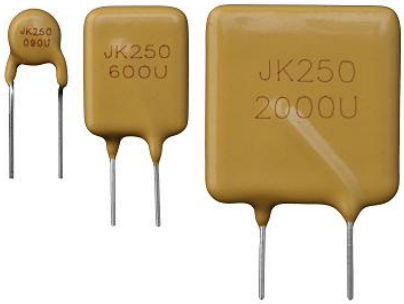
Polymer PTC Resettable Fuse JK250 Series

Features:

- ✧ Radial leaded Devices
- ✧ Cured,flame retardant epoxy polymer insulating material meets UL94V-0
- ✧ Bulk packaging,or tape and reel available on most models
- ✧ Agency recognition:UL、CSA、TUV
- ✧ Rohs compliant and lead-free



No.E217453

TÜVRheinland®
Precisely Right.
No. R 50158898

RoHS
Compliant

Product Dimensions

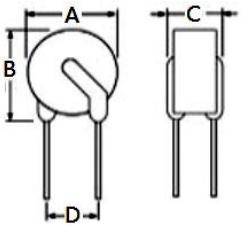


Fig.1

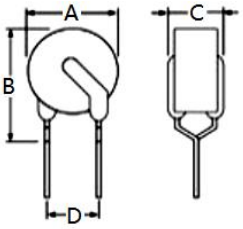


Fig.2

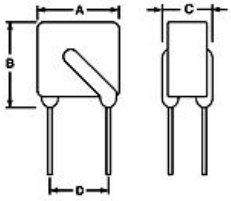


Fig.3

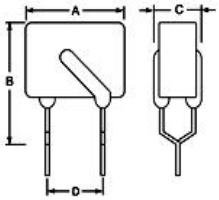


Fig.4

Unit ： mm

JK250 Series

Model	Dimensions（mm）				Lead material	Shape
	A(max)	B(max)	C(max)	D(typ)	Tinned matel(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

Note: ① Dimensions A, B, C is the maximum size, D values are typical tolerance of ± 0.75mm.

Thermal Derating Chart-IH（A）

Model	Maximum ambient operating temperatures（℃）									
	-40℃	-20℃	0℃	25℃	30℃	40℃	50℃	60℃	70℃	85℃
JK-250 series	148%	132%	117%	100%	91%	85%	77%	68%	61%	45%

Electrical Characteristic

Model	Ihold（mA）	Itrip(mA)	Vmax interrupt（V）	Imax（A）	$P_{d\ max}$（W）	Maximum Time to Trip		Resistance(Ω)
						Current(A)	Time(S)	R_{min-} R_{max}
JK250-020U	20	45	250	3	1.0	0.5	0.5	80-160
JK250-030U	30	65	250	3	1.0	0.5	0.5	60-120
JK250-040U	40	80	250	3	1.0	0.5	1.5	30-60
JK250-050U	50	100	250	3	1.0	0.5	2	25-50
JK250-060U	60	120	250	3	1.0	0.5	2	20-60
JK250-080U	80	160	250	3	1.0	1	0.5	12-22
JK250-090U	90	180	250	3	1.0	1	0.8	10-20
JK250-100U	100	200	250	3	1.0	1	1	10-20
JK250-110U	110	220	250	3	1.0	1	2.0	6-12
JK250-120U	120	240	250	3	1.0	1	2.0	6-11
JK250-145U	145	290	250	3	1.0	1	5.0	3.5-6.5

JK250-180T	180	650	250	3	1.8	3	3.0	1.0-2.2
JK250-180U	180	650	250	3	1.8	3	1.5	2.0-4.0
JK250-200U	200	400	250	5	2.4	3	5	3-6
JK250-400U	400	800	250	5	2.8	3	8	1-3
JK250-600U	600	1200	250	5	3.2	3	12	0.6-2.0
JK250-800U	800	1600	250	5	3.6	4	18	0.4-1.0
JK250-1000U	1000	2000	250	7	3.6	5	20	0.3-0.8
JK250-1200U	1200	2400	250	7	3.6	6	20	0.2-0.8
JK250-1500U	1500	3000	250	7	4.8	7.5	20	0.2-0.6
JK250-2000U	2000	4000	250	10	4.8	10	20	0.2-0.4

I_H=Hold current:maximum current at which the device will not trip at 25℃ still air.

I_T=Trip current:minimum current at which the device will nalways at 25℃ still air.

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

I_{max}=Maximum fault current device can withstand tithout damage at rated voltage.

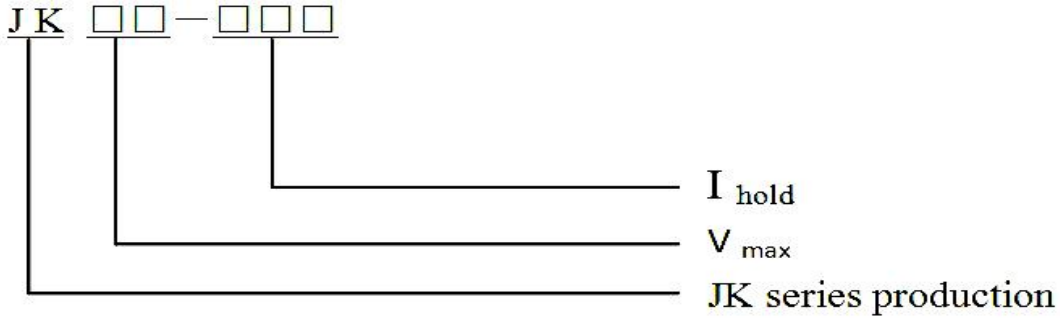
T_{trip}=Maximum time to trip(s) at assigned current.

P_d=Typical power dissipation:typical amount of power dissipated by the decice when in state air environment.

R_{min}=Minimum device resistance at 25℃ prior to tripping.

R_{max}=Maximum device resistance at 25℃ prior to tripping.

Marking System



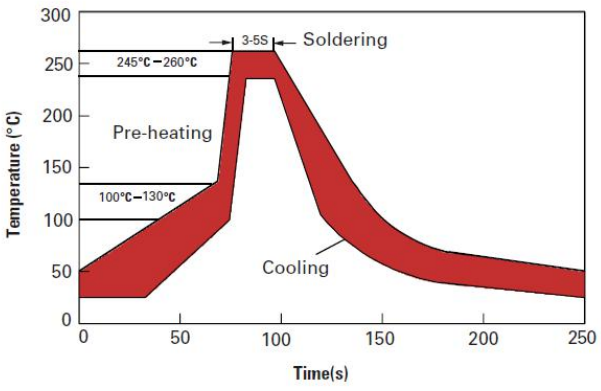
Environmental Specifications

Test	Conditions	Resistance change
Passive aging	+85℃， 1000hrs	±8% typical
Humidity aging	+85℃， 85%R.H.1000hrs	±8% typical
Thermal shock	+125℃ to -55℃， 10times	±12% typical
Resistance to solvent	MIL-STD-202， Method 215	No change
Vibration	MIL-STD-202， Method 201	No change

Solder reflow conditions

Wave Soldering

Soldering Temperature:260℃~270℃



Soldering Time:≤3sec.

Soldering Position: Resettable fuse wire and the bottom ≥ 6mm。

Manual soldering

Soldering Temperature:250℃~280℃

Soldering Time: ≤3sec.

Soldering Position: Resettable fuse wire and the bottom ≥ 6mm。

Packaging and Storage

Bag quantity

JK250～020U～JK250-180U	1000Pcs/Bag
JK250-200U～JK250-600U	500 Pcs/Bag
JK250-800U～JK250-2000U	200 Pcs/Bag

Storage

The maximum ambient temperature shall not exceed 40℃.Storage temperatures higher than 40℃ could result in the deformation of packaging materials.The maximum relative humidity recommended for storage is 70%.High humidity with high temperature can accelerate the oxidation the oxidation of the solder plating on the termination and reduce the solderability of the components.sealed plastic bags with desiccant shall be used to teduce the oxidation of the termination and shall only be opened prior to use.the products shall not be stored in areas where harmful gases containing sulfu of chlorine are present.

Warning:

Please read this specification before use the product。

Using of this product must be sure to follow the requirement of this specification， operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and flame.

PPTC resettable fuses are intended for occasional over current protection. Application for repeated over current condition or prolonged trip are not anticipated.

Please avoid contact of PPTC resettable fuses with chemical solvent. Prolonged contact will damage the device performance.

You are requested not to use our product deviating from the agreed specifications.