



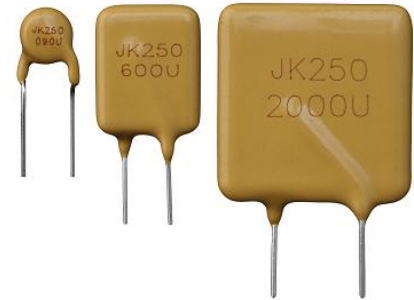
Polymer PTC Resettable Fuse

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



Product Dimensions

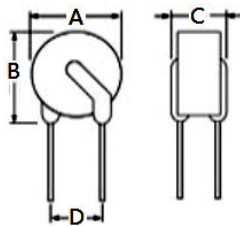


Fig.1

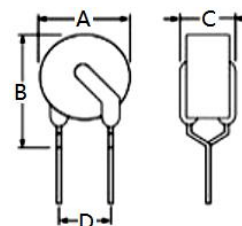


Fig.2

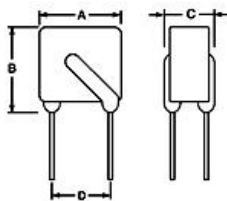


Fig.3

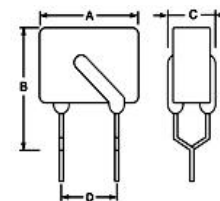


Fig.4

Unit : mm

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

Shenzhen Jinrui Electronic Material Co., Ltd

TEL: +86-(0)755-26546327 29356619

Website: http://www.jkpptc.com

Add: Jinke Industry Park, No.310, Wuhe Road, Guanlan, Longhua District, Shenzhen, Guangdong, China.

FAX: +86-(0)755-26546562

E-mail: customer@jkpptc.com

Specifications are subject to change without notice !



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

Thermal Derating Chart-IH (A)

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%

Electrical Characteristic

Model	IH (A)	IT(A)	VMAX (V)	IMAX (A)	Pd (w)	Maximum Time-to-trip		Resistance(Ω)
						Current (A)	Time(S)	RMIN- RMAX
JK250-020U	20	45	250	3	1.0	0.5	0.5	50-160
JK250-030U	30	65	250	3	1.0	0.5	0.5	40-120
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

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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 interrupt in 25°C still air.

I_T=Trip current:Minimum current at which the device from low resistance to high resistance in 25°C still air.

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

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

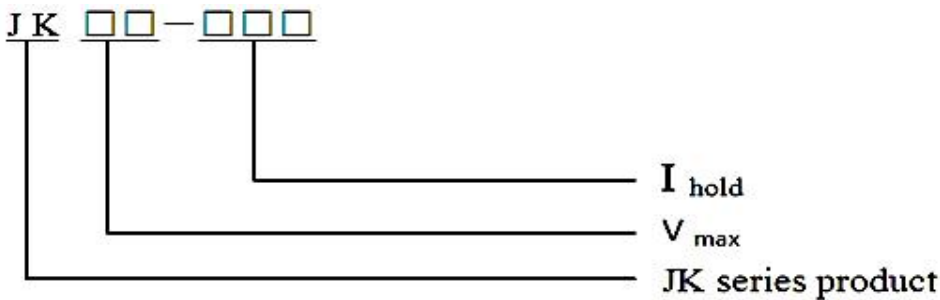
Maximum Time-to-trip:Maximum time to trip at assigned current.

P_d=Typical power dissipation:Typical amount of power dissipated from the device when in 25°C still air environment.

R_{MIN}=Minimum resistance of device at 25°C prior to tripping.

R_{MAX}=Maximum resistance of device at 25°C prior to tripping.

Marking System



Environmental Specifications

Test	Conditions	Resistance change
Passive Aging	+85°C, 1000 hours	±8% typical
Humidity Aging	+85°C, 85%R.H.1000 hours	±8% typical
Thermal Shock	+125°C to -55°C, 10 Times	±12% typical
Solvent Resistance	MIL-STD-202, Method 215F	No change
Vibration	MIL-STD-202, Method 201	No change

Soldering method

Wave Soldering

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Soldering Temperature:260°C~270°C

Soldering Time:≤3sec.

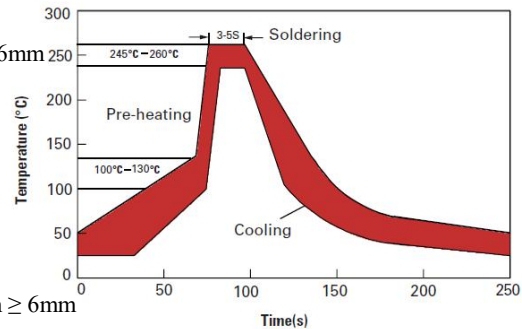
Soldering Position: Resettable fuse lead and the distance from the bottom ≥ 6mm

Manual soldering

Soldering Temperature:250°C~280°C

Soldering Time: ≤3sec.

Soldering Position: Resettable fuse lead and the distance from the bottom ≥ 6mm



Packaging and Storage

Packaging 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°C.Storage temperature higher than 40°C 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 of the solder plating on the leads and reduce the solderability of the components.Sealed plastic bags with desiccant shall be used to reduce the oxidation of the leads and shall only be opened prior to use.The products shall not be stored in areas where harmful gases containing acid or alkali or other harmful substances are present.

Warning:

- Please read this specification before using the product.
- Use PPTC beyond the maximum ratings or improper use may result in device damage, electrical arcing and flame.
- PPTC are intended for protection against occasional over current or over temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.
- Use PPTC with a large inductance in circuit will generate a circuit voltage above the rated voltage of the PPTC.
- Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.
- Contamination of the PPTC material with certain silicon based oils or some aggressive solvents can adversely impact the

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performance of the devices. PPTC can be cleaned by standard methods.

Notes:

The specification is intended to present application product and technical data to assist the user in selecting PPTC circuit production devices, However, users should independently evaluate and test the suitability of each product. Jinrui makes no warranties as to the accuracy or completeness of the information and disclaims any liability resulting from its use, Jinrui's only obligations are those in the Jinrui Standard Terms and Conditions of Sale and in no case will Jinrui be liable for any incidental, indirect, or consequential damages arising from the sale, resale, or misuse of its products. Jinrui reserves the right to change or update any information contained in this specification without notice.