

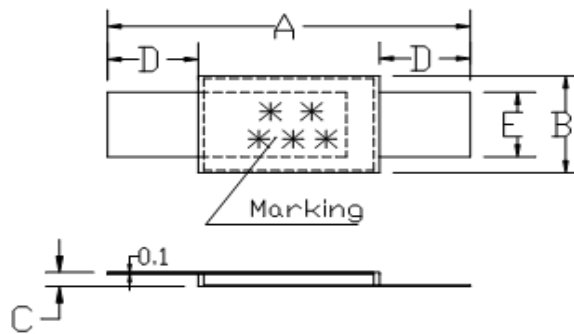


Features:

- ✧ Lower power consumption by lower resistance
- ✧ The miniaturized PTC elements leads a flexible design around battery
- ✧ Typical used for protection of Li-ion /Polymer Li-ion battery
- ✧ Lead-free
- ✧ Halogen free
- ✧ Agency recognition:UL、CSA、TUV



Product Dimensions



Unit : mm
JK-M Series

Model	A		B		C		D		E	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
JK-M120	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M140	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M175	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M190	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M210	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M260	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M270	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M300	13	15	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M350	14.5	17	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M370	14.5	17	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4

Shenzhen Jinrui Electronic Materials 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

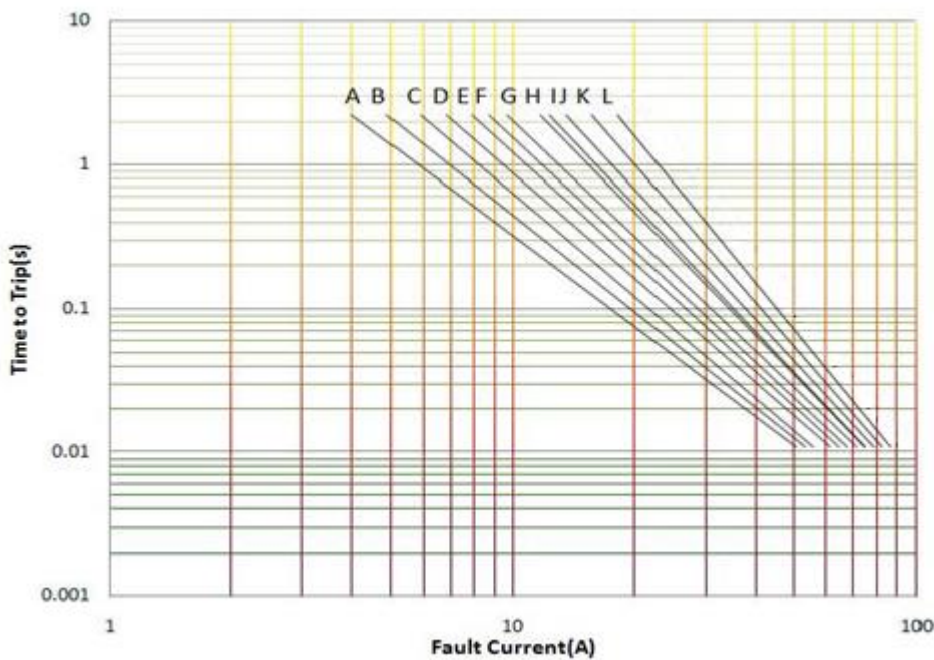
E-mail:customer@jkpptc.com

Specifications are subject to change without notice !

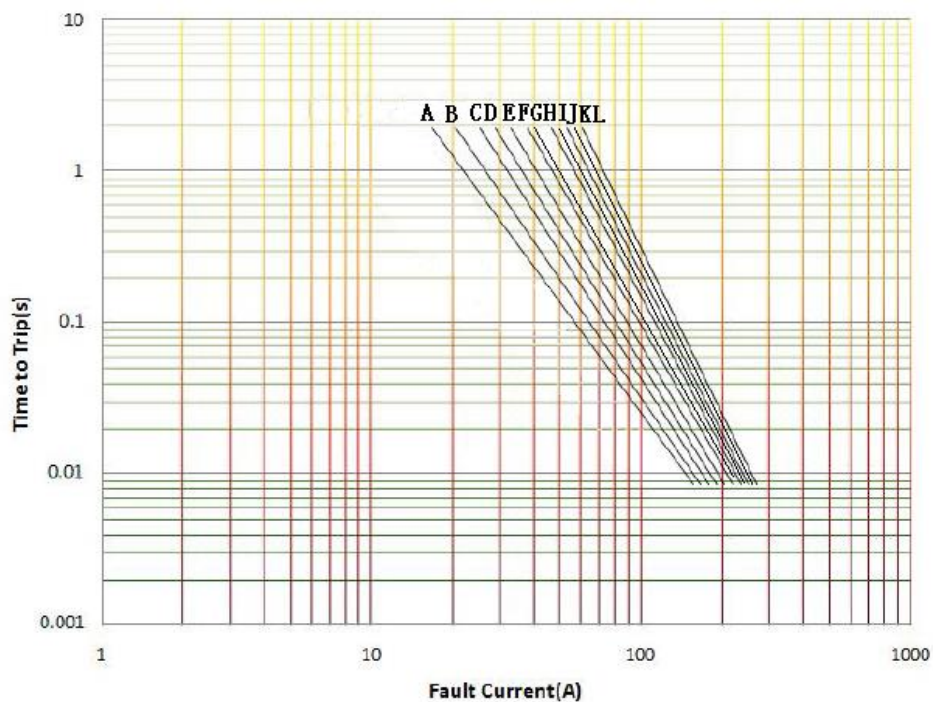


JK-M400	14.5	17	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M430	14.5	17	3.0	3.6	0.6	1.0	3.5	5.5	2.2	2.4
JK-M450	21.5	23.3	3.50	3.90	0.55	1.0	4.5	6.5	2.2	2.4
JK-M500	21.5	23.3	3.50	3.90	0.55	1.0	4.5	6.5	2.2	2.4
JK-M550	21.5	23.3	3.50	3.90	0.55	1.0	4.5	6.5	2.2	2.4
JK-M600	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M650	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M700	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M730	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M800	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M850	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M900	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M950	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2
JK-M1000	20.9	23.1	4.6	5.5	0.60	1.00	4.0	6.0	3.8	4.2

Typical Time-to-Trip Chart at 25°C



- A--- JK-M120
- B--- JK- M140
- C--- JK- M175
- D--- JK-M190
- E--- JK-M210
- F--- JK-M260
- G--- JK-M270
- H--- JK-M300
- I--- JK-M350
- J--- JK-M370
- K--- JK-M400
- L--- JK-M430



- A--- JK-M450
- B--- JK- M500
- C--- JK- M550
- D--- JK-M600
- E--- JK-M650
- F--- JK-M700
- G--- JK-M750
- H--- JK-M800
- I--- JK-M850
- J--- JK-M900
- K--- JK-M950
- L--- JK-M1000

Thermal Derating Chart-IH (A)

Model	Maximum ambient operating temperature (°C)							
	-40	-20	0	25	40	50	60	70
JK-M120	2.00	1.80	1.55	1.20	1.00	0.85	0.70	0.55
JK-M140	2.40	2.10	1.80	1.40	1.14	0.97	0.80	0.63
JK-M175	3.10	2.65	2.25	1.75	1.40	1.25	1.05	0.85
JK-M190	3.60	3.10	2.60	1.90	1.60	1.30	1.20	1.00
JK-M210	3.60	3.20	2.80	2.10	1.84	1.40	1.34	1.10
JK-M260	4.50	3.95	3.35	2.60	2.15	1.85	1.70	1.15
JK-M270	4.60	4.00	3.40	2.70	2.20	1.90	1.60	1.30
JK-M300	5.20	4.50	3.85	3.00	2.45	2.10	1.75	1.40
JK-M350	5.90	5.20	4.50	3.50	2.80	2.40	2.00	1.60
JK-M370	6.10	5.40	4.70	3.70	3.00	2.50	2.10	1.70
JK-M400	6.20	5.50	4.80	4.00	3.30	2.80	2.50	2.00
JK-M430	6.30	5.60	4.90	4.30	3.50	3.00	2.70	2.20
JK-M450	6.40	5.70	5.05	4.50	4.05	3.70	3.40	3.05
JK-M500	6.95	6.20	5.60	5.00	4.50	4.10	3.80	3.40
JK-M550	7.60	6.80	6.15	5.50	4.95	4.50	4.25	3.85
JK-M600	8.25	7.40	6.65	6.00	5.40	5.00	4.70	4.30
JK-M650	8.90	8.05	7.20	6.50	5.80	5.45	5.10	4.70

Shenzhen Jinrui Electronic Materials 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 !



JK-M700	9.60	8.70	7.70	7.00	6.20	5.80	5.40	5.05
JK-M730	9.85	9.00	8.00	7.30	6.45	6.05	5.65	5.25
JK-M800	10.40	9.80	8.80	8.00	7.00	6.60	6.20	5.80
JK-M850	11.25	10.40	9.40	8.50	7.50	7.00	6.75	6.10
JK-M900	12.10	11.00	9.95	9.00	7.95	7.40	6.90	6.40
JK-M950	12.60	11.50	10.0	9.50	8.40	7.90	7.25	6.75
JK-M1000	13.15	12.00	11.00	10.00	8.90	8.40	7.65	7.10

Electrical Characteristics

Model	I _H	I _T	V _{max}	I _{max}	P _d	Maximum Time-to-trip		R _{min}	R _{max}	R _{I_{max}}
	(A)	(A)	(V)	(A)	(W)	Current(A)	Time(S)	(Ω)	(Ω)	(Ω)
JK-M120	1.20	3.50	10	50	1.00	6.0	5.0	0.015	0.035	0.070
JK-M140	1.40	3.60	10	50	1.00	7.0	5.0	0.010	0.020	0.040
JK-M175	1.75	4.30	10	50	1.00	8.75	5.0	0.009	0.018	0.036
JK-M190	1.90	4.90	10	50	1.00	9.50	3.0	0.007	0.014	0.028
JK-M210	2.10	5.60	10	50	1.00	10.50	3.0	0.007	0.014	0.028
JK-M260	2.60	6.00	10	50	1.00	13.00	3.0	0.006	0.014	0.028
JK-M270	2.70	6.20	10	50	1.00	13.50	3.0	0.006	0.014	0.028
JK-M300	3.00	8.00	10	50	1.30	15.00	3.0	0.005	0.013	0.026
JK-M350	3.50	8.80	10	50	1.30	17.50	3.0	0.005	0.013	0.026
JK-M370	3.70	9.00	10	50	1.30	18.50	5.0	0.005	0.013	0.026
JK-M400	4.00	9.60	10	50	1.50	20.00	5.0	0.004	0.012	0.024
JK-M430	4.30	10.00	10	50	1.50	21.50	5.0	0.004	0.012	0.024
JK-M450	4.50	10.80	10	50	1.50	22.50	5.0	0.004	0.012	0.024
JK-M500	5.00	12.00	10	50	1.50	25.00	5.0	0.003	0.011	0.022
JK-M550	5.50	13.00	10	50	1.50	27.50	5.0	0.003	0.011	0.022
JK-M600	6.00	13.00	10	50	1.50	30.00	5.0	0.003	0.009	0.018
JK-M650	6.50	13.00	10	50	1.50	32.50	5.0	0.002	0.008	0.016
JK-M700	7.00	14.00	10	50	1.50	35.00	5.0	0.002	0.007	0.015
JK-M730	7.30	15.00	10	50	1.50	36.50	5.0	0.002	0.007	0.014
JK-M800	8.00	17.00	10	50	1.50	40.00	5.0	0.002	0.005	0.010
JK-M850	8.50	17.50	10	50	1.50	42.00	5.0	0.002	0.005	0.010
JK-M900	9.00	18.00	10	50	1.50	45.00	5.0	0.002	0.005	0.010
JK-M950	9.50	19.00	10	50	1.50	47.50	5.0	0.002	0.004	0.010
JK-M1000	10.00	20.00	10	50	1.50	50.00	5.0	0.001	0.004	0.010

Shenzhen Jinrui Electronic Materials Co., Ltd.

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

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

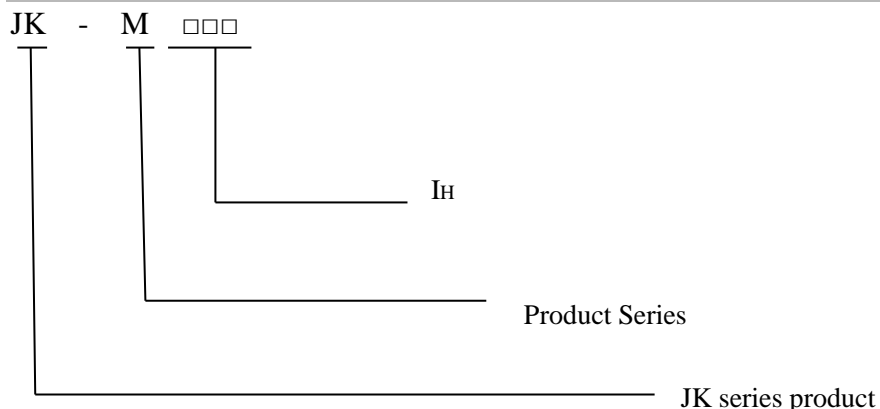
Add: Jinke Industry Park, No.310,Wuhe Road,Guanlan,Longhua District,Shenzhen,Guangdong,China.

FAX: +86-(0)755-26546562

E-mail:customer@jkpptc.com

Specifications are subject to change without notice !

Marking System



Test Procedures And Requirements

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air at 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, V _{MAX} , 25°C	T ≤ Maximum Time-to-Trip
Hold Current	60min, at I _H	No trip
Trip Cycle Life	V _{MAX} , I _{MAX} , 1000 cycles	No arcing or burning
Trip Endurance	V _{MAX} , 1 hour	No arcing or burning

Physical Characteristics and Environmental Specifications

Physical Characteristics

Lead material	0.10mm nominal thickness, quarter-hard nickel
Tape material	Polyester

Environmental Specifications

Test	Conditions	Resistance Change
Passive Aging	-40°C, 1000 hours	$\leq R_{1max}$
	85°C, 1000 hours	$\leq R_{1max}$
Humidity Aging	60°C/95%RH, 1000 hours	$\leq R_{1max}$
Vibration	ML-STD-883C, Method 2026	No change

Electrical Specifications:

Shenzhen Jinrui Electronic Materials 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.

Specifications are subject to change without notice !

FAX: +86-(0)755-26546562

E-mail: customer@jkpptc.com



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.

R_{1MAX} =Maximum device resistance one hour after it is tripped at 25°C

Packaging and Storage

Packaging

500/1000pcs per 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 performance of the devices. PPTC can be cleaned by standard methods.

Notes:

Shenzhen Jinrui Electronic Materials 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.

Specifications are subject to change without notice !

FAX: +86-(0)755-26546562

E-mail:customer@jkpptc.com



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.