

Resettable Fuse PTC 30V Series

Features

RoHS Compliant & Halogen Free

Radial leaded Devices

Cured, flame retardant epoxy polymer insulating material meets UL94V-0 requirements

Operation Current: 0.5A~9A , Maximum Voltage: 30Vdc, Operating

Operating Temperature: -40℃ to +85℃

Agency recognition:



Dimensions(Unit:mm)

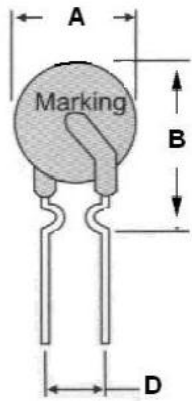


Fig.1

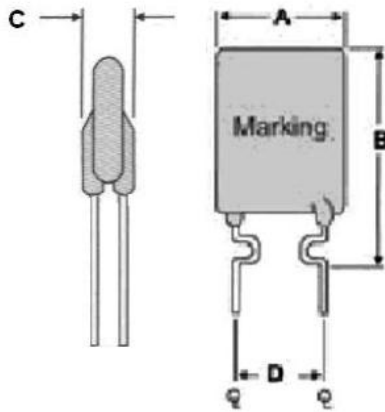


Fig.2

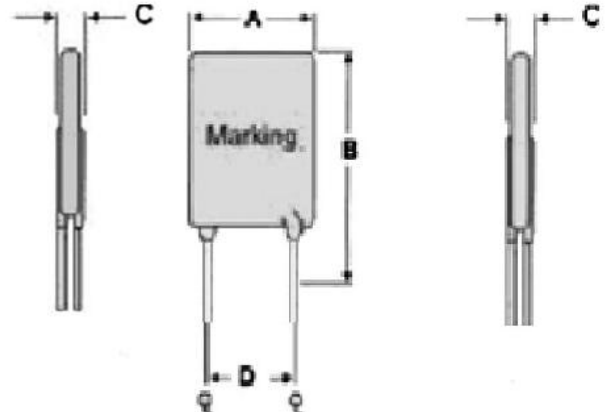


Fig.3

Part number	Dimensions(mm)				Lead material	Shape	Certification		Delivery Time	
	A(max)	B(max)	C(max)	D(Typ)	Tinned Matel(mm)	Fig	UL	TUV	in stock	Produce
JK30050	7.40	12.7	3	5.10	24 AWG/ Φ0.5	Fig1	-	√	3days	14days
JK30075	7.40	13.0	3	5.10	24 AWG/ Φ0.5	Fig1	√	√	3days	14days
JK30090	7.40	18.5	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30110	7.40	18.5	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30120	7.40	18.5	3	5.10	24 AWG/ Φ0.5	Fig2	-	√	3days	14days
JK30135	9.20	17.6	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30160	9.20	20.2	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30185	9.20	20.2	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30200	15.2	20.2	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30250	13.2	22.4	3	5.10	24 AWG/ Φ0.5	Fig2	√	√	3days	14days
JK30300	13.2	20.4	3	5.10	20 AWG/ Φ0.8	Fig3	√	√	3days	14days

Specifications are subject to change without notice

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Part number	Dimensions(mm)				Lead material	Shape	Certification		Delivery Time	
	A(max)	B(max)	C(max)	D(Typ)	Tinned Matel(mm)	Fig	UL	TUV	in stock	Produce
JK30400	14.0	23.7	3	5.10	20 AWG/ Φ0.8	Fig3	√	√	3days	14days
JK30500	14.0	23.7	3	10.2	20 AWG/ Φ0.8	Fig3	√	√	3days	14days
JK30600	17.2	27	3	10.2	20 AWG/ Φ0.8	Fig3	√	√	3days	14days
JK30700	17.2	27	3	10.2	20 AWG/ Φ0.8	Fig3	√	√	3days	14days
JK30800	23.5	29.2	3	10.2	20 AWG/ Φ0.8	Fig3	√	√	3days	14days
JK30900	23.5	29.2	3	10.2	20 AWG/ Φ0.8	Fig3	√	√	3days	14days

Note: Dimensions A,B,Cis the maximum size,D Values is typical tolernce of ±0.5mm

thermal Derating Chart-IH(A)

Maximum ambient operating temperatures °C										
Part Number	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	80℃	85℃
JK30050	0.72	0.65	0.57	0.5A	0.45	0.41	0.38	0.34	0.30	0.25
JK30075	1.08	0.97	0.86	0.75A	0.68	0.62	0.57	0.51	0.45	0.37
JK30090	1.30	1.17	1.03	0.9A	0.81	0.74	0.69	0.61	0.54	0.45
JK30110	1.59	1.43	1.26	1.1A	1.0	0.91	0.84	0.74	0.67	0.55
JK30120	1.74	1.56	1.38	1.2A	1.09	0.99	0.92	0.81	0.73	0.6
JK30135	1.95	1.75	1.55	1.35A	1.22	1.12	1.03	0.91	0.82	0.67
JK30160	2.32	2.08	1.84	1.6A	1.45	1.32	1.23	1.08	0.97	0.8
JK30185	2.68	2.40	2.12	1.85A	1.68	1.53	1.42	1.25	1.12	0.92
JK30200	2.9	2.6	2.3	2A	1.82	1.66	1.54	1.36	1.22	1
JK30250	3.62	3.25	2.87	2.5A	2.27	2.07	1.92	1.7	1.52	1.25
JK30300	4.35	3.9	3.45	3A	2.73	2.49	2.31	2.04	1.83	1.5
JK30400	5.8	5.2	4.6	4A	3.64	3.32	3.08	2.72	2.44	2
JK30500	7.25	6.5	5.75	5A	4.55	4.15	3.85	3.4	3.05	2.5
JK30600	8.7	7.8	6.9	6A	5.46	4.98	4.62	4.08	3.66	3
JK30700	10.15	9.1	8.05	7A	6.37	5.81	5.39	4.76	4.27	3.5
JK30800	11.6	10.4	9.2	8A	7.28	6.64	6.16	5.44	4.88	4
JK30900	13.05	11.7	10.35	9A	8.19	7.47	6.93	6.12	5.49	4.5

Electrical characteristics(25°C)



Part Number	I Hold	I Trip	V _{max}	I _{max}	P _d Max	Maximum Time to Trip		Nominal resistance (mΩ)		Certification		Delivery Time	
	A	A	DC	A	W	Current (A)	Time (S)	R _{min}	R _{max}	UL	TUV	in stock	Produce
JK30050	0.50	1.0	30V	40	0.5	2.5	5.0	250	600	-	√	3days	14days
JK30075	0.75	1.5	30V	40	0.6	3.75	5.0	200	370	√	√	3days	14days
JK30090	0.90	1.8	30V	40	0.7	4.5	8.0	100	220	√	√	3days	14days
JK30110	1.10	2.2	30V	40	0.7	5.5	8.0	70	200	√	√	3days	14days
JK30120	1.20	2.4	30V	40	0.8	6.0	8.0	80	180	-	√	3days	14days
JK30135	1.35	2.7	30V	40	0.8	6.75	8.0	70	160	√	√	3days	14days
JK30160	1.60	3.2	30V	40	0.9	8.0	8.0	60	140	√	√	3days	14days
JK30185	1.85	3.7	30V	40	1.0	9.25	8.0	50	120	√	√	3days	14days
JK30200	2.00	4.0	30V	40	1.2	10.0	11	40	100	√	√	3days	14days
JK30250	2.50	5.0	30V	40	1.2	12.5	11	30	80	√	√	3days	14days
JK30300	3.00	6.0	30V	40	2.0	15.0	11	30	70	√	√	3days	14days
JK30400	4.00	8.0	30V	40	2.5	20.0	12.7	10	60	√	√	3days	14days
JK30500	5.00	10	30V	40	3.0	25.0	14.5	10	50	√	√	3days	14days
JK30600	6.00	12	30V	40	3.5	30.0	16	5	40	√	√	3days	14days
JK30700	7.00	14	30V	40	3.8	35.0	17.5	5	30	√	√	3days	14days
JK30800	8.00	16	30V	40	4.0	40.0	18.8	5	25	√	√	3days	14days
JK30900	9.00	18	30V	40	4.2	40.0	20	5	20	√	√	3days	14days

I_{Hold}=Hold current:maximum current at which the device will not trip at 25°C still air.

I_{Trip}=Trip current:minimum current at which the device will nalways at 25°C 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.

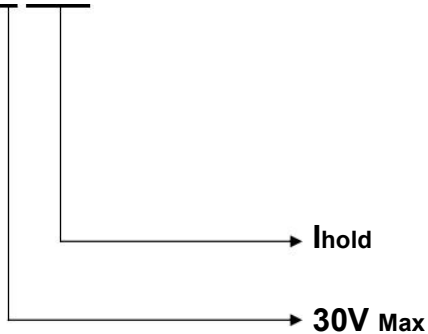
R_{min}=Minimum device resistance at 25°C prior to tripping.

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

Marking System



JK30 XXX



Test Procedures and Requirements

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{max}$
Time to Trip	Specified current, V_{max} , 25°C	Tmaximum Time to Trip
Hold Current	60min ,at I_H	No trip
Trip Cycle Life	V_{max} , I_{max} , 100cycles	No arcing or burning
Trip Endurance	V_{max} , 24hours	No arcing or burning

Physical Characteristics and Environmental Specifications

Physical Characteristics

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

Operation Condition

1 Ambient temperature: -40°C ~ +85°C

2 Humidity: ≤95%HR(40°C)

3 Atmospheric pressure: 86Kpa ~ 106Kpa.

4 Vibration frequency: 10Hz ~ 50Hz.

5 Acceleration: 98m/s².

6 Storage temperature: -40°C ~ 85°C.

7 Soldering

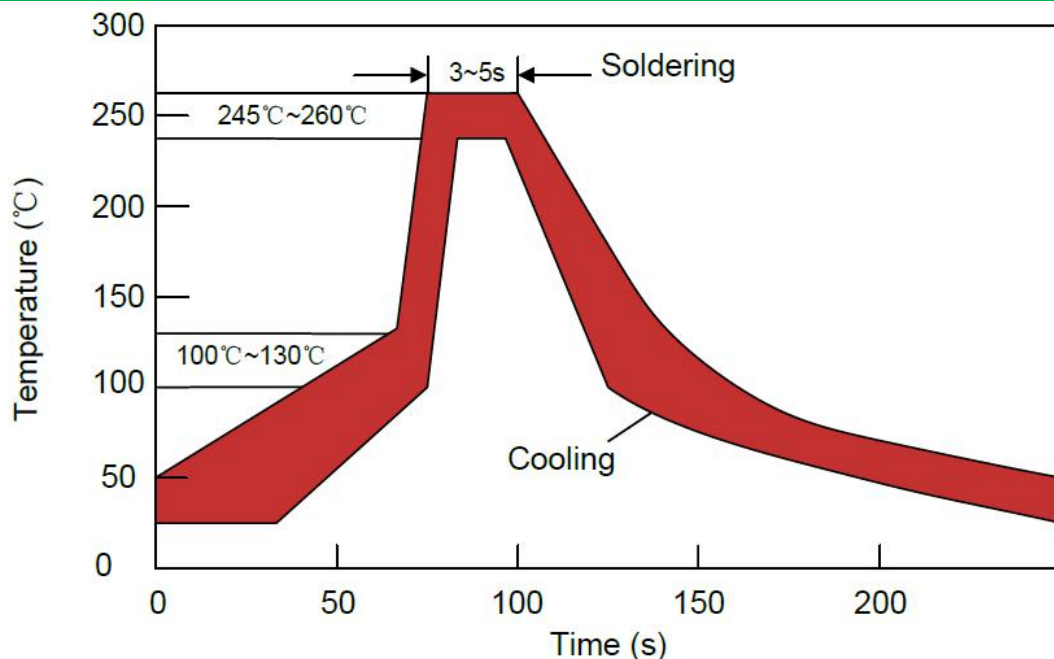
7.1 Wave Soldering:

Soldering Temperature: 240°C ~ 270°C

Soldering Time: ≤5sec.

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

Wave Soldering Recommendation Parameters



7.2 Manual soldering

Soldering Temperature: 280°C~300°C

Soldering Time: ≤2sec.

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

Packing quantity:

JK30050 ~ JK30250	1000pcs/Bag
JK30300 ~ JK30500	500pcs/Bag
JK30600 ~ JK30900	200pcs/Bag



Warning:

PTC devices are intended for protection against occasional over-current or over-temperature fault conditions, and should not be used when repeated fault conditions are anticipated. Operation beyond maximum ratings of improper use may result in device damage and possible electrical arcing and flame.

Notes:

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