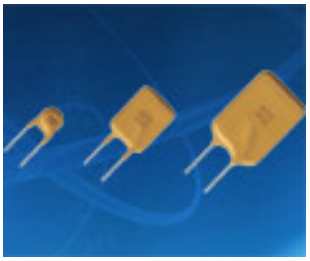
# BJK250 Series PPTC Fuse



## Features

- Radial leaded PTC fuse
- Treated, flame retardant epoxy polymer insulating material, meets UL94V-0 requirements
- Bulk packaging, tape and reel available for most models

## Applications

Almost all appliances with low voltage power supply, up to DC 60V, and where a load has to be protected, including:

- Security and fire alarm systems
- Analog and digit line cards
- Modems and DSL routers

## Electrical Characteristics (@ 25℃)

| Part Number | $I_{hold}$ (mA) | $I_{trip}$ (mA) | $V_{max}$ OP ($V_{dc}$) | $V_{max}$ Interrupt ($V_{rms}$) | $I_{max}$ (A) | $P_d$ Typ (W) | Maximum Time To Trip | | Resistance | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Current (A) | Time (s) | $R_{min}$ (Ω) | $R_{max}$ (Ω) | $R_{1max}$ (Ω) |
| BJK250-020U | 20 | 45 | 60 | 250V | 3.0 | 1.0 | 0.5 | 0.4 | 80 | 160 | 240 |
| BJK250-030U | 30 | 65 | 60 | 250V | 3.0 | 1.0 | 0.5 | 0.5 | 60 | 120 | 180 |
| BJK250-040U | 40 | 80 | 60 | 250V | 3.0 | 1.0 | 0.5 | 1.0 | 30 | 60 | 100 |
| BJK250-060U | 60 | 120 | 60 | 250V | 3.0 | 1.0 | 0.5 | 0.5 | 20 | 60 | 90 |
| BJK250-080U | 80 | 160 | 60 | 250V | 3.0 | 1.0 | 1.0 | 0.4 | 14 | 22 | 33 |
| BJK250-090U | 90 | 180 | 60 | 250V | 3.0 | 1.0 | 1.0 | 0.5 | 10 | 20 | 31 |
| BJK250-100U | 100 | 200 | 60 | 250V | 3.0 | 1.0 | 1.0 | 1.0 | 10 | 20 | 31 |
| BJK250-110U | 110 | 220 | 60 | 250V | 3.0 | 1.0 | 1.0 | 1.2 | 6 | 12 | 16 |
| BJK250-120 | 120 | 240 | 60 | 250V | 3.0 | 1.0 | 1.0 | 1.2 | 5 | 10 | 14 |
| BJK250-120U | 120 | 240 | 60 | 250V | 3.0 | 1.0 | 1.0 | 1.2 | 6 | 11 | 16 |
| BJK250-145U | 145 | 290 | 60 | 250V | 3.0 | 1.0 | 1.0 | 4.0 | 3.5 | 6.5 | 14 |
| BJK250-180T | 180 | 650 | 60 | 250V | 10.0 | 1.8 | 3.0 | 1.5 | 1.0 | 2.2 | 4 |
| BJK250-180U | 180 | 650 | 60 | 250V | 10.0 | 1.8 | 3.0 | 1.5 | 1 | 3 | 5 |
| BJK250-200U | 200 | 400 | 60 | 250V | 10.0 | 2.4 | 3.0 | 5.0 | 3 | 6 | 9 |
| BJK250-400U | 400 | 800 | 60 | 250V | 10.0 | 2.8 | 3.0 | 8.0 | 1 | 3 | 6 |
| BJK250-600U | 600 | 1200 | 60 | 250V | 10.0 | 3.2 | 3.0 | 12.0 | 0.6 | 2.0 | 5 |
| BJK250-800U | 800 | 1600 | 60 | 250V | 10.0 | 3.6 | 5.0 | 18.0 | 0.4 | 1.0 | 3 |
| BJK250-1000U | 1000 | 2000 | 60 | 250V | 10.0 | 3.6 | 5.0 | 20.0 | 0.3 | 0.8 | 2 |
| BJK250-1200U | 1200 | 2400 | 60 | 250V | 10.0 | 3.6 | 6.0 | 20.0 | 0.2 | 0.8 | 2 |
| BJK250-1500U | 1500 | 3000 | 60 | 250V | 10.0 | 4.8 | 7.5 | 20.0 | 0.2 | 0.6 | 1.5 |
| BJK250-2000U | 2000 | 4000 | 60 | 250V | 10.0 | 4.8 | 10.0 | 20.0 | 0.2 | 0.4 | 1.5 |

$I_{hold}$ Hold current：Maximum current the thermistor will sustain without tripping at 25℃ ambient temperature for 1hr

$I_{trip}$ Trip current： lowest current at which the thermistor will trip by default at 25℃ ambient temperature

$V_{max}$ Maximum voltage the thermistor can withstand without damage at rated current ($I_{max}$)

$I_{max}$ Maximum fault current device can withstand without damage at rated voltage ($V_{max}$)

$P_d$ The power dissipating from the thermistor when it is in tripped state at 25℃ ambient temperature.

$R_{min/max}$ Minimum/Maximum resistance of the thermistor before an initial trip event

$R_{1max}$ Maximum resistance of the thermistor 1 hour after the initial trip event, measured at 25℃ ambient temperature

*CAUTION: Operation beyond the specified rating may result in damage and possible arcing. The thermistors are intended for protection against occasional overcurrent or over-temperature faults and should not be used when repeated fault conditions are anticipated.

## Ordering Information

| Series No. | Operating Current | Packaging | Quantity | Purchase Order No. |
|---|---|---|---|---|
| BJK250 | | | | |

# BJK250 Series PPTC Fuse

## Product Dimensions (in mm) and Packing Information

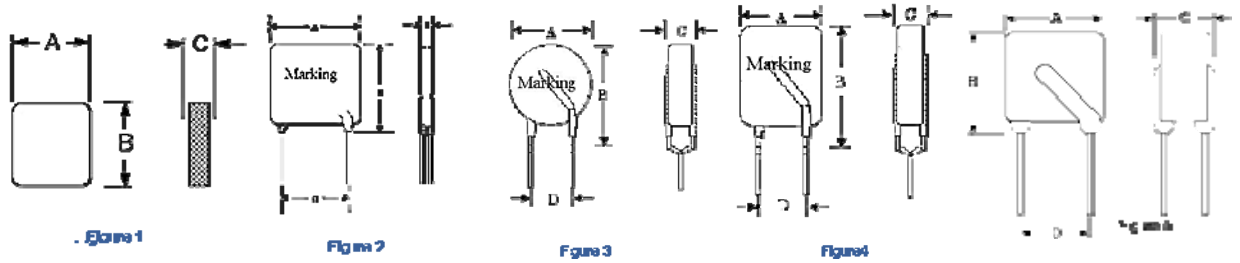



Figure 1 Figure 2 Figure 3 Figure4

| Model | Fig. | Quantity | A(max) | B(max) | C(max) | D(type) |
|---|---|---|---|---|---|---|
| BJK250-020U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-030U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-040U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-060U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-080U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-090U | 1 | 1000 | 7.4 | 12.7 | 4.6 | 5.1 |
| BJK250-100U | 1 | 1000 | 7.8 | 12 | 4.6 | 5.1 |
| BJK250-110U | 3 | 1000 | 7.0 | 12.6 | 4.6 | 5.1 |
| BJK250-120 | 4 | 1000 | 5.5 | 5.5 | 2.2 | --- |
| BJK250-120U | 3 | 1000 | 7.0 | 12.6 | 4.6 | 5.1 |
| BJK250-145U | 3 | 1000 | 7.0 | 12.6 | 4.6 | 5.1 |
| BJK250-180T | 1 | 1000 | 10.2 | 14.5 | 4.2 | 5.1 |
| BJK250-180U | 3 | 1000 | 11.5 | 14.5 | 4.6 | 5.1 |
| BJK250-200U | 5 | 500 | 12.0 | 17.0 | 4.6 | 5.1 |
| BJK250-400U | 5 | 500 | 12.0 | 17.0 | 4.6 | 5.1 |
| BJK250-600U | 5 | 500 | 16.0 | 18.0 | 4.6 | 5.1 |
| BJK250-800U | 5 | 200 | 20.0 | 22.5 | 4.6 | 5.1 |
| BJK250-1000U | 5 | 200 | 20.0 | 22.0 | 4.6 | 5.1 |
| BJK250-1200U | 5 | 200 | 22.0 | 28.0 | 4.6 | 5.1 |
| BJK250-1500U | 5 | 200 | 25.0 | 30.0 | 4.6 | 5.1 |
| BJK250-2000U | 5 | 200 | 26.0 | 32.0 | 4.6 | 10.2 |

NOTE: The package quantity refers to one bag (unit: pcs).

## Physical Characteristics

| Model | Lead Material |
|---|---|
| BJK250-020U ~ BJK250-600U | Thin plated copper, 22AWG Φ0.60mm |
| BJK250-800U ~ BJK250-2000U | Thin plated copper, 22AWG Φ0.80mm |

## Environmental Specifications

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

Storage conditions: 5℃~40℃