承　　认　　书
APPROVAL　SHEET

编　号 No.	BJK250-020-A/1-B
日期 Date	2020.07.03

客　　户 Customer	

品　　名 Product	Radial leaded PPTC fuse
系　　列 Series	BJK250 Series

料号 Part No.		规格描述 Specification	备注 Remark
贝特电子 Betterfuse		Radial leaded PPTC 250VAC	
客　　户 Customer			

环保特别提示 Special instructions for environmental protection
本产品：

供应商-贝特电子 Supplier-Betterfuse		零件承认章 Approval Signet	客　　户 Customer	零件承认章 Approval Signet
制　作 Make				
审　核 Check				
确　认 Approval				

联络 Contact			
业务 Sales	电话 Telephone	手机 Cellphone	邮箱 E-mail
零件承认后敬请回签一份给我司留存，或将承认后的封面传真（0769-8352 1857）至我司，谢谢！			

Document Record						
No.	Date	Modified Content	Page	Edition	Prepared/modified by	Checked by
1	9/22/2014	Draft		A/0	JEFFERY/BTG	GLUECK
2	2020.07.03	Update content		A/1	YaLan Wang	Fei Gao
3	2020.12.01	Update explain	4	A/2	YaLan Wang	Fei Gao
5	2020.12.15	Update resistance range of 020U		A/2	YaLan Wang	Fei Gao
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1. SCOPE AND DESCRIPTION

Following electronic product specifications apply to fuses of the BJK250 series. The BJK250 series is a PPTC fuse for over-current protection.

It can be employed in almost all appliances power supply up to AC 250V, and where a load has to be protected, including including security and fire alarm systems, analog and digital line cards, modems and DSL.

2. GENERAL INFORMATION

General Description

The BJK250 series resettable fuse is specially designed for communication switches and distribution frames. This series have been repeatedly tested and approved by the Chinese Ministry for Information Industry, various product testing centers for protection devices and the CSBTS. Its performance is completely conform to the industrial standard for Post and Telecommunications Industry “YDT 741-2002: Communications equipment overcurrent protection with positive temperature coefficient (PTC) thermistor technical requirements".

Detailed Features

- Radial leaded Devices
- Cured,flame retardant epoxy polymer insulating material meets UL94V-0
- Bulk packaging,or tape and reel available on most models
- ROHS compliant and lead-free

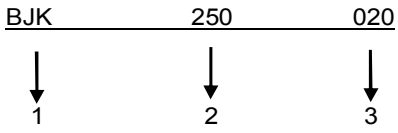
3. AGENCY APPROVALS

Agency	Agency File Number	Ampere/ Voltage Range
c UL us	E345393	250V:0.4A;0.6A;0.8A;0.9A;1.2A;1.45A;1.8A;2.0A 4.0A;6.0A;8.0A;10A;12A;15A;20A
TUV SUD	NO.B1011950002	250V:0.4A;0.5A;0.6A;0.8A;0.9A;1A;1.2A;1.45A 1.8A;2A;4A;6A;8A;10A;12A;15A;20A
CQC	CQC19001219363	250V:0.4A;0.5A;0.6A;0.8A;0.9A;1A;1.1A;1.2A; 1.45A;1.8A;2A;4A;6A;8A;10A;12A;15A;20A

4. PART NUMBERING SYSTEM

4.1 Part Number

Example: BJK250-020



1 .Product Series ..... BJK
2 .Maximum Operation Voltage..... 250V
3 .Hold Current 0.02A

5. CONSTRUCTION AND MECHANICAL CHARACTERISTICS

Construction (unit:mm)

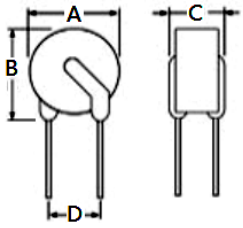


Fig.1

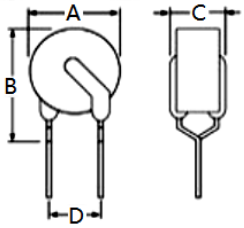


Fig.2

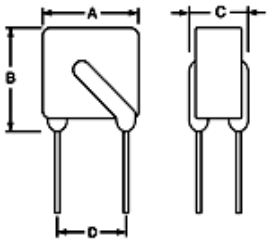


Fig.3

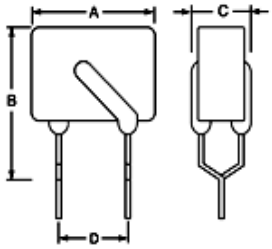


Fig.4

Model	Dimensions（mm）				Lead material	Shape
	A(max)	B(max)	C(max)	D(typ)	Tinned matel(mm)	Fig
BJK250-020U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1
BJK250-030U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1
BJK250-040U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
BJK250-050U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
BJK250-060U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	1/2
BJK250-080U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	2
BJK250-090U	7.4	12.7	4.5	5.1	22AWG/Φ0.6	2
BJK250-100U	7.8	12.6	4.5	5.1	22AWG/Φ0.6	1
BJK250-110U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
BJK250-120U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
BJK250-145U	7.0	12.6	4.5	5.1	22AWG/Φ0.6	4
BJK250-180T	10.2	14.5	3.8	5.1	22AWG/Φ0.6	2
BJK250-180U	9.0	11.0	4.5	5.1	22AWG/Φ0.6	4
BJK250-200U	12.0	17.0	4.5	5.1	22AWG/Φ0.6	3
BJK250-400U	12.0	17.0	4.5	5.1	22AWG/Φ0.6	3
BJK250-600U	16.0	18.0	4.5	5.1	22AWG/Φ0.6	3
BJK250-800U	20.0	22.5	4.5	5.1	20 AWG/Φ0.8	3
BJK250-1000U	20	22.5	4.5	5.1	20 AWG/Φ0.8	3
BJK250-1200U	22	28	4.5	5.1	20 AWG/Φ0.8	3
BJK250-1500U	25	30	4.5	5.1	20 AWG/Φ0.8	3
BJK250-2000U	26	32	4.5	10.2	20 AWG/Φ0.8	3

Note: ① Dimensions A, B, C are the maximum sizes, all typicl valuesof D is rhe l tolerance of ± 0.75mm.

Environmental Specifications

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

6. ELECTRICAL SPECIFICATIONS

Model	Ih（mA）	It(mA)	Vmax interrupt（V）	Imax（A）	P_d （W）	Maximum Time to Trip		Resistance(Ω)
						Current(A)	Time(S)	R_{min}- R_{max}
BJK250-020U	20	45	250	3	1.0	0.5	0.5	70.0~160
BJK250-030U	30	65	250	3	1.0	0.5	0.5	60.0~120
BJK250-040U	40	80	250	3	1.0	0.5	1.5	30.0~60.0
BJK250-050U	50	100	250	3	1.0	0.5	2	25.0~50.0
BJK250-060U	60	120	250	3	1.0	0.5	2	20.0~60.0
BJK250-080U	80	160	250	3	1.0	1	0.5	12.0~22.0
BJK250-090U	90	180	250	3	1.0	1	0.8	10.0~20.0
BJK250-100U	100	200	250	3	1.0	1	1.0	10.0~20.0
BJK250-110U	110	220	250	3	1.0	1	2.0	6.00~12.0
BJK250-120U	120	240	250	3	1.0	1	2.0	6.00~11
BJK250-145U	145	290	250	3	1.0	1	5.0	3.5~6.5
BJK250-180T	180	650	250	3	1.8	3	3.0	1.0~2.2
BJK250-180U	180	650	250	3	1.8	3	1.5	2.0~4.0
BJK250-200U	200	400	250	5	2.4	3	5.0	3.0~6.0
BJK250-400U	400	800	250	5	2.8	3	8.0	1.0~3.0
BJK250-600U	600	1200	250	5	3.2	3	12	0.6~2.0
BJK250-800U	800	1600	250	5	3.6	4	18	0.4~1.0
BJK250-1000U	1000	2000	250	7	3.6	5	20	0.3~0.8
BJK250-1200U	1200	2400	250	7	3.6	6	20	0.2~0.8
BJK250-1500U	1500	3000	250	7	4.8	7.5	20	0.2~0.6
BJK250-2000U	2000	4000	250	10	4.8	10	20	0.2~0.4

I_h=Hold current:Maximum current at which the device will not interruptin 25℃ still air.

I_t=Trip current:Minimum current at which the device from low resistance to high resistance in 25℃ 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.

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

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

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

Thermal Derating Chart-IH（A）

Model	Maximum ambient operating temperatures（℃）								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
BJK250-020U	0.030	0.026	0.023	0.020	0.017	0.015	0.014	0.012	0.009
BJK250-030U	0.044	0.040	0.035	0.030	0.026	0.023	0.020	0.018	0.014
BJK250-040U	0.059	0.053	0.047	0.040	0.034	0.031	0.027	0.024	0.018
BJK250-050U	0.074	0.066	0.059	0.050	0.043	0.039	0.034	0.031	0.023
BJK250-060U	0.089	0.079	0.070	0.060	0.051	0.046	0.041	0.037	0.027
BJK250-080U	0.118	0.106	0.094	0.080	0.068	0.062	0.054	0.049	0.036
BJK250-090U	0.133	0.119	0.105	0.090	0.077	0.069	0.061	0.055	0.041
BJK250-100U	0.148	0.132	0.117	0.100	0.085	0.077	0.068	0.061	0.045
BJK250-110U	0.163	0.145	0.129	0.110	0.094	0.085	0.075	0.067	0.050
BJK250-120U	0.178	0.158	0.140	0120	0.102	0.092	0.082	0.073	0.054
BJK250-145U	0.215	0.191	0.170	0.145	0.123	0.112	0.099	0.088	0.065
BJK250-180T	0.266	0.238	0.211	0.180	0.153	0.139	0.122	0.110	0.081
BJK250-180U	0.266	0.238	0.211	0.180	0.153	0.139	0.122	0.110	0.081
BJK250-200U	0.296	0.264	0.234	0.200	0.170	0.154	0.136	0.122	0.090
BJK250-400U	0.592	0.528	0.468	0.400	0.340	0.308	0.272	0.244	0.180
BJK250-600U	0.888	0.792	0.702	0.600	0.510	0.462	0.408	0.366	0.270
BJK250-800U	1.184	1.056	0.936	0.800	0.680	0.616	0.544	0.488	0.360
BJK250-1000U	1.480	1.320	1.170	1.000	0.850	0.770	0.680	0.610	0.450
BJK250-1200U	1.776	1.584	1.404	1.200	1.020	0.924	0.816	0.732	0.540
BJK250-1500U	2.220	1.980	1.755	1.500	1.275	1.155	1.020	0.915	0.675
BJK250-2000U	2.960	2.640	2.340	2.000	1.700	1.540	1.360	1.220	0.900

7. SOLDERING PARAMETERS

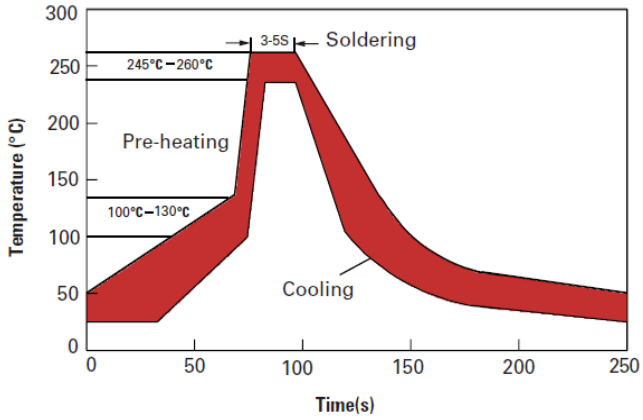
Soldering method

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

Packaging quantity

BJK250～020U～BJK250-180U 1000Pcs/Bag

BJK250-200U～BJK250-600U 500 Pcs/Bag

BJK250-800U～BJK250-2000U 200 Pcs/Bag

Storage

The maximum ambient temperature shall not exceed 40℃.Storage temperature 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 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 substancesare present.

8. ORDERING INFORMATION

The following information are necessary in order to place your order with us correctly:

Series No.	Operating Current	Packaging Code	Quantity	Purchase Order No.
BJK250				