

1. Description, Features and Applications

LED AC/DC

Descriptions:

The B1032Cz series slow-blow square Surface Mount fuses are ceramic tube/end cap constructions, RoHS compliant, Halogen Free and lead(Pb) exempts of the requirements of RoHS Directive(2002/95/EC), with U.S. (UL/CSA) safety agency approvals. Provide board level primary and secondary circuit protection in a wide variety of applications. With excellent inrush current withstanding capability, excellent reliability for thermal and mechanic shock, also have a high reliability and stable solder ability, end caps are available in gold/silver/nickel plated.

Features:

- Time-Lag (Slow-Blow)
- Wide range of current rating available
- Low temperature de-rating
- Tape and Reel for automatic placement
- Small size(10.2mm*3.2mm)
- Wide operating temperature range
- RoHS compliant
- Conflict free metals

Applications:



- LED lighting
- LCD backlight inverter
- PC server
- Wireless base station
- Digital camera
- Notebook PC
- Portable Devices
- Cooling fan system
- White goods
- Industrial equipment
- Battery devices
- Power supply
- Storage system
- Game console
- Medical equipment
- LCD/PDP devices
- Networking devices
- Telecom system
- Office equipment
- Automotive devices

2. Standards and Agency Approvals



2.1 UL 248-14。

Standards: In accordance with UL 248-14.

2.2 Certification:

Agency	Ampere Range	Agency File Number
	200mA ~ 40A	E340427(JDYX2)
	200mA ~ 40A	E340427(JDYX8)

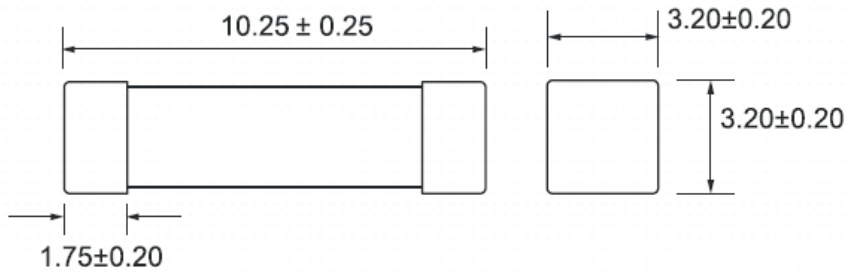
2.3 Catalogue No., ● Approved/ ○ Pending

目录编号 Catalog No.	额定电流 Ampere Rating	额定电压 Voltage Rating	分断能力 Breaking Capacity	冷阻值 Nominal Cold Resistance (Ohms)	熔化热能 I ² T Melting Integral(A ² .S)	安规认证 Agency Approvals	
							
B1032Cz200	200mA	250V/125V DC 72V/100V DC 63V60V/32V DC	1KA@32V 500A@72V60V 150A@63V72V100V 150A@125V250V	2.550	0.08	●	●
B1032Cz250	250mA			1.630	0.218	●	●
B1032Cz300	300mA			1.102	0.387	●	●
B1032Cz315	315mA			1.040	0.367	●	●
B1032Cz375	375mA			0.621	0.631	●	●
B1032Cz400	400mA			0.600	0.650	●	●
B1032Cz500	500mA			0.551	1.01	●	●
R1032T.0600	600mA			0.360	2.01	●	●
B1032Cz600	630mA			0.351	2.02	●	●
B1032Cz700	700mA			0.190	3.73	●	●
B1032Cz750	750mA			0.186	3.83	●	●
B1032Cz800	800mA			0.180	3.91	●	●
B1032CzA01.00	1A			0.177	4.01	●	●
B1032CzA01.25	1.25A			0.112	7.34	●	●
B1032CzA01.50	1.5A			0.072	11.92	●	●
B1032CzA01.60	1.6A			0.071	12.63	●	●
B1032CzA01.60	2A			0.054	14.40	●	●
B1032CzA02.50	2.5A			0.041	28.12	●	●
B1032CzA03.00	3A			0.032	45.3	●	●
B1032CzA03.15	3.15A			0.031	45.6	●	●
B1032CzA03.50	3.5A			0.024	63.5	●	●
B1032CzA04.00	4A			0.022	64.1	●	●
B1032CzA05.00	5A			0.015	112.0	●	●
B1032CzA06.00	6A			0.013	145.3	●	●
B1032CzA06.30	6.3A			0.012	145.6	●	●
B1032CzA07.00	7A			0.0083	147.2	●	●
B1032CzA08.00	8A			0.0080	161	●	●
B1032CzA10.00	10			0.0053	170	●	●
B1032CzA12.00	12A			0.0045	187	●	●
B1032CzA15.00	15A			0.0038	337	●	●
B1032CzA16.00	16A			0.0032	338	●	●
B1032CzA20.00	20A			0.0024	720	●	●
B1032CzA25.00	25A			0.0018	1182	●	●
B1032CzA30.00	30A			0.0014	2050	●	●
B1032CzA40.00	40A			0.0012	3750	●	●

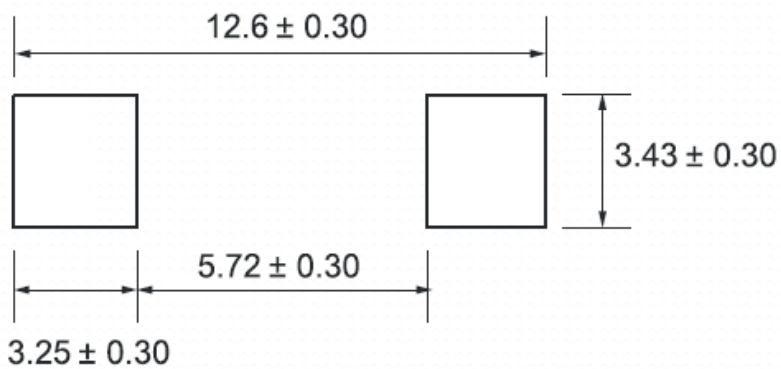
- *: These catalog no. cold resistance and I2t value are pending due to fuse elements shall be customized;
- DC Cold Resistance are measured at <10% of rated current in ambient temperature of 25 °C;
- Typical Pre-arching I2t are calculated at 10*In Current or 8ms;
- Min Interrupting Rating: 1.35*In.

3. Dimensions and Structure

Unit: mm



Recommended pad layout



4. Material Details

NO.	Part Name	Material
①	End caps	Au Plated Brass Cap
②	Body	Non-Transparent Square Ceramic Tube
③	Fuse element	Cu-Ag Alloy wire

5. Product Characteristics

NO.	Item	Content	Reference standards
1	Product Marking	Ampere Rating	marking standards
2	Operating Temperature	-55 °C to 125 °C	-55 °C to 125 °C with proper derating
3	Solderability	T=240 °C ± 5 °C , t=3sec ± 0.5sec, Coverage ≥ 95%	MIL-STD-202, Method 208
4	Resistance to Soldering Heat	10 sec at 260 °C	MIL-STD-202, Method 210, Test condition B
5	Insulation Resistance (after Opening)	10,000 ohms minimum	MIL-STD-202, Method 302, Test Condition A
6	Thermal Shock	5 cycles, -65 °C / +125 °C, 15 minutes at each extreme	MIL-STD-202, Method 107, Test Condition B
7	Mechanical Shock	100G's peak for 6 milliseconds, 3cycles	MIL-STD-202, Method 213, Test I
8	Vibration	0.03" amplitude, 10-55 Hz in 1 min. 2hrs each XYZ=6hrs	MIL-STD-202, Method 201
9	Moisture Resistance	10 cycles	MIL-STD-202, Method 106
10	Salt Spray	5% salt solution, 48hrs	MIL-STD-202, Method 101, Test Condition B

6. Electrical Characteristics

7.1 Test Condition

25 ± 5 °C.

All electrical test is to be conducted with the ambient air at a temperature of 25 ± 5 °C. 7.2

Interrupting Rating:

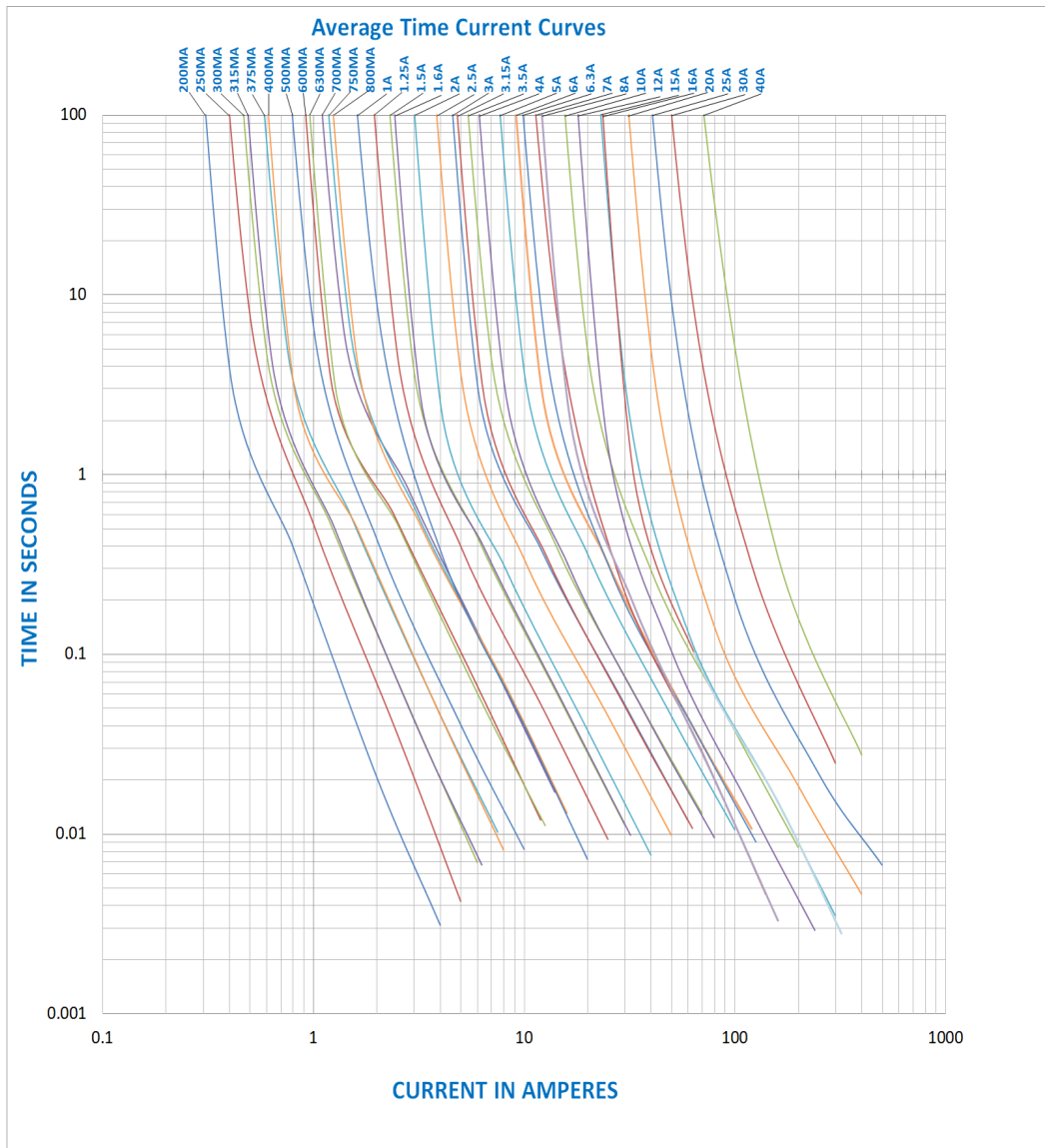
150A@63V72V100V125V250V 1KA@32V 500A@60V72V

Breaking Capacity: 150A@63V72V100V125V250V 1KA@32V 500A@60V72V

6.3 Operating Characteristics

% of Ampere Rating(In)	Blowing Time
100% * In	4 hours Min
200% * In	120 sec Max

6.4 Average Time Current Curves

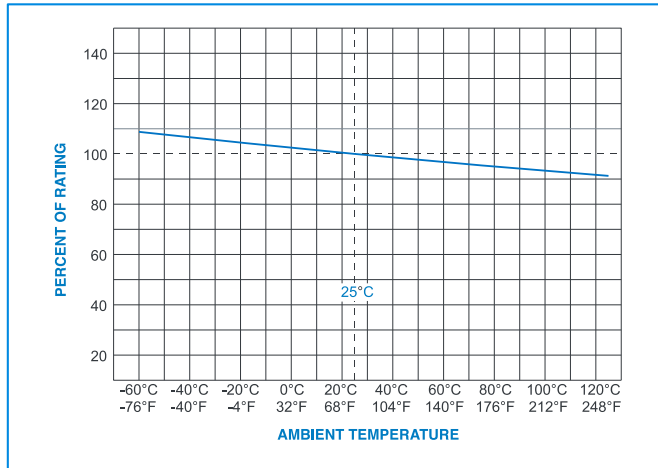


7. Environmental Characteristic

25 ± 5°C

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from 20~30°C, engineer should consider the environmental temperature's affection to fuses.

Please refer: Temperature Derating Curve:



8. Recommended Soldering Parameters

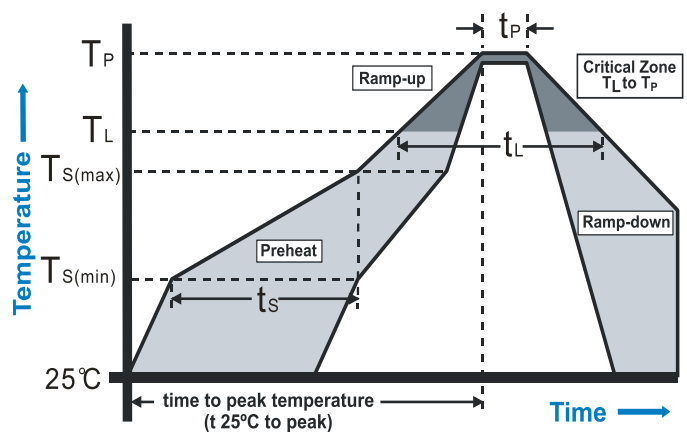
A. Wave /Reflow Soldering Parameters:

Solder paste process.

Solder Pot Temperature: 260°C Max

Solder Dwell Time: 5 seconds max

Reflow Condition		Pb-Free assembly
Average ramp-up rate (Ts(max) to Tp)		5 °C /second max.
Preheat	Temperature Min (Ts(min))	150 °C
	Temperature Max (Ts(max))	200 °C
	Time (Min to Max) (ts)	60-120 seconds
Reflow	Temperature (TL)	220 °C
	Time Max (tL)	60 seconds
Peak Temperature(Tp)		260 °C max
Ramp-down Rate		5 °C/second max
Time 25 °C to peak Temperature (Tp)		8 minutes max



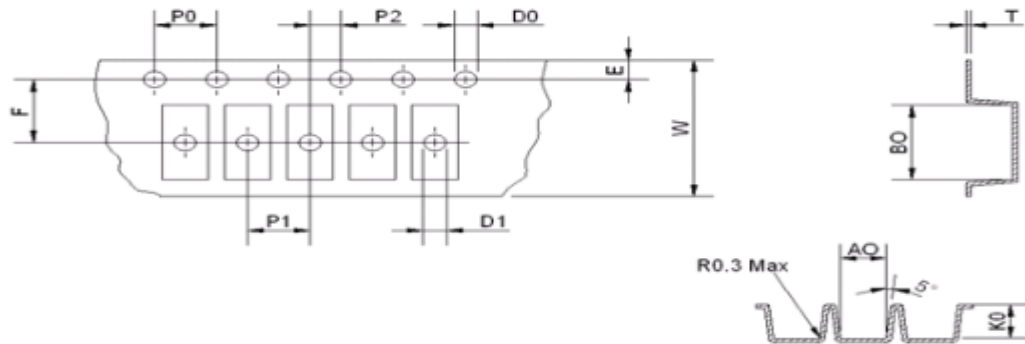
B. Hand-Solder Parameters:

Solder Iron Temperature: 300 ± 5 °C

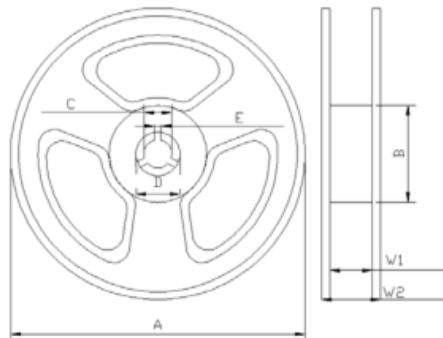
Heating Time: 1~2 s Max

9. Packaging

2000 pieces of fuses on 24mm tape-and-reel on 13 inch (330mm) reel



Symbol	A0(mm)	B0(mm)	E(mm)	F(mm)	W(mm)	K0(mm)
Spec.	3.50±0.10	10.60±0.15	1.75±0.10	11.50±0.10	24.00±0.30	3.50±0.10
Symbol	P0(mm)	P1(mm)	P2(mm)	D0(mm)	D1(mm)	T(mm)
Spec.	4.00±0.10	8.00±0.10	2.00±0.10	1.50+0.10/-0	1.50+0.10/-0	0.35±0.05



Type	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	W1(mm)	W2(mm)
Spec	330.0±2.0	100.0±1.5	13.0±0.5	21.0±0.5	2.2±0.2	24.5±1.5	28.5±2.0

10. Others

10.1 In the event that an impropriety is found beyond this specification, it shall be fixed by mutual agreement between the parties.