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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

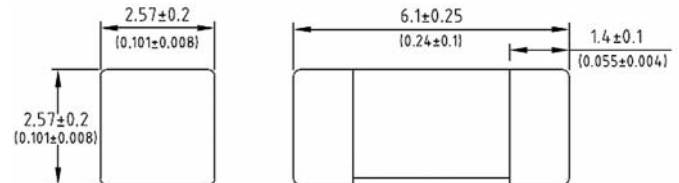
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Fast-Acting SMD Brick™ Fuses CB61F Series



### Dimensions - mm Drawing Not to Scale



### Description

The fast-acting CB61F Series of SMD Brick™ fuse provides high breaking capacity performance in a CQC Approved SMD package. The CB61F Series offers 125Vac/50A and 125Vdc/300A protection up to 15 amps, which is among the highest in its class.

### Features

- High Interrupting Ratings: 50A @ 125Vac / 300A @ 125Vdc
- Wide Selection: The CB61F Series is available in ratings from 2 to 15 amps providing a range of solutions for applications requiring fast-acting performance
- CQC Approved: Meets the growing market demand.
- cULus Certified and PSE Level 1 Certified
- Excellent Environmental Integrity: lead-free, halogen free and RoHS compliant, and present no disposal issues at end of life.
- Solder immersion compatible
- Wire-in-Air design

### Applications

- LCD/PDP TVs
- LCD Monitors
- LCD backlight inverters
- Notebooks
- Servers
- Power supplies
- Telecom/PoE
- Medical equipment
- White goods
- Industrial applications

### Agency Information

- cULus: Standard UL 248-14, Guide JDYX, File E 19180 and Guide JDYX7, File E19180
- PSE: JET 1641-31007-1003 (2A-5A)  
JET 1641-31007-1004 (6.3A-10A)  
JET 1641-31007-1005 (12-15A)
- CQC: CQC09012040316 (2A-6.3A & 8A-10A)

### Ordering

Specify product and packaging code

### Environmental Data

- Mechanical Shock: MIL-STD-202G, Method 213B, Test Condition C (100 G's peak for 6 milliseconds; half-sine waveform)
- Mechanical Vibration: MIL-STD-202G, Method 201, Test Condition A (10-55Hz, 0.06 inch, total excursion)
- Insulation Resistance: MIL-STD-202, Method 302, Test Condition A (after opening) 10,000 ohms minimum
- Resistance to Solder Heat: MIL-STD-202G, Method 210F, Test Condition D (10 sec, at 260°C); Test Condition A (350°C, 5s) for hand solder
- Thermal Shock: MIL-STD-202, Method 107G, Test Condition B (-65°C to +125°C)

### Specifications

Catalog Number	Current Ratings (amps)	Voltage Ratings		Interrupting Ratings (amps)*		Typical Cold Resistance (Ω)**	Typical Melting I <sup>2</sup> t (A <sup>2</sup> s)***	Typical Voltage Drop (mV)†	Agency Approvals		
		Vac	Vdc	125Vac	125Vdc				cULus	PSE	CQC
CB61F2A	2	125	125	100	300	0.039	0.85	100	X	X	X
CB61F3A	3	125	125	100	300	0.025	2.08	100	X	X	X
CB61F4A	4	125	125	100	300	0.017	4.4	93	X	X	X
CB61F5A	5	125	125	100	300	0.013	7.7	90	X	X	X
CB61F6.3A	6.3	125	125	100	300	0.010	13.7	90	X	X	X
CB61F7A	7	125	125	100	300	0.009	15.6	85	X	X	
CB61F8A	8	125	125	100	300	0.008	19.5	90	X	X	X
CB61F10A	10	125	125	100	300	0.006	36	90	X	X	X
CB61F12A	12	125	125	50	300	0.005	40	90	X	X	
CB61F15A	15	125	125	50	300	0.004	56	85	X	X	

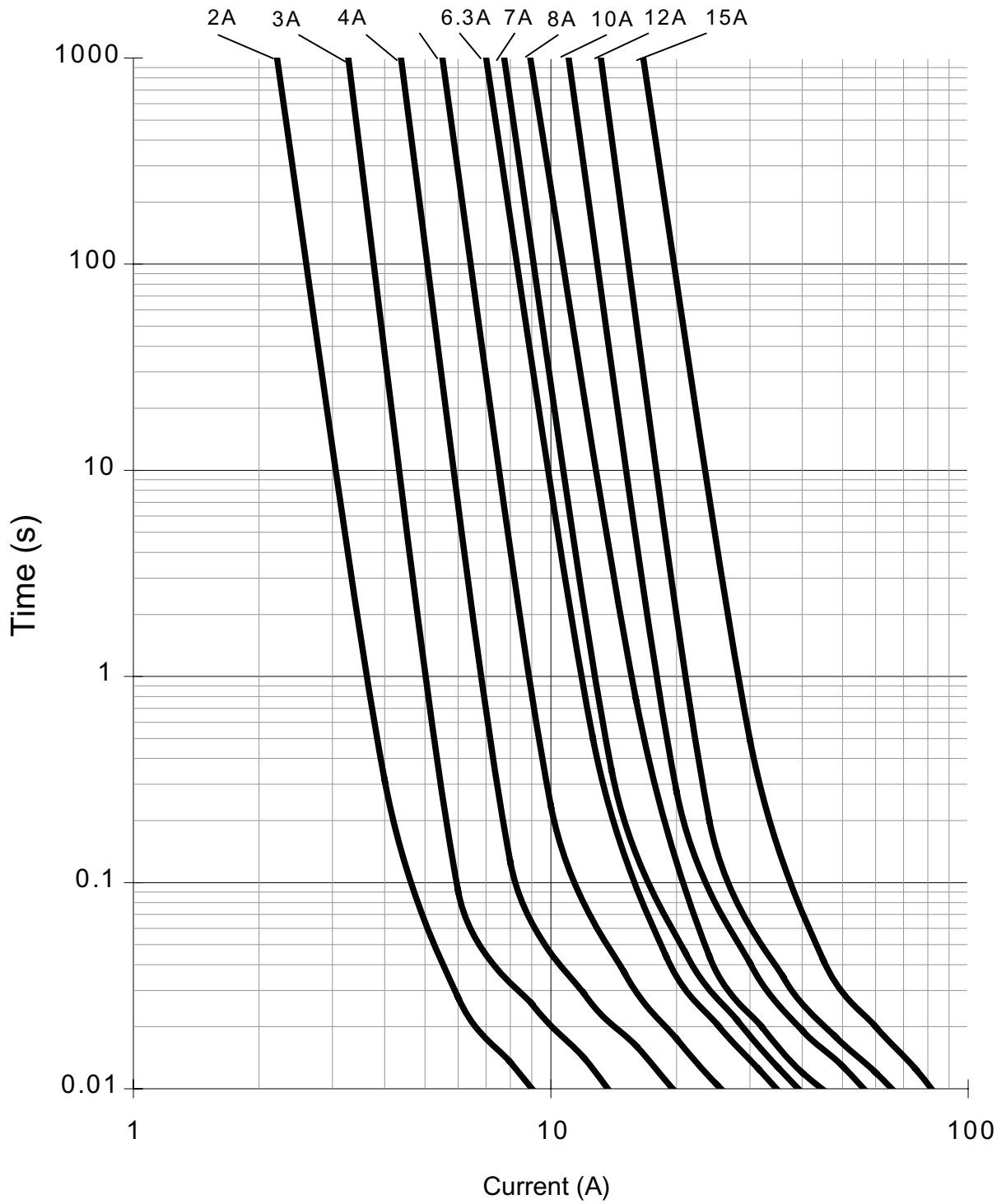
\* AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds, battery source)

\*\* Typical Cold Resistance (measured at 10% of rated current)

\*\*\* Typical Melting I<sup>2</sup>t (measured with a battery bank at rated DC voltage, 10x-rated current, time constant of calibrated circuit less than 50 microseconds)

† Typical Voltage Drop (measured at rated current after temperature stabilizes)

### Time-Current Curves





## Soldering Characteristics

### Wave Immersion

- Reservoir Temperature: 260° C
- Time in Reservoir : 10 Seconds Maximum

### Infrared Reflow

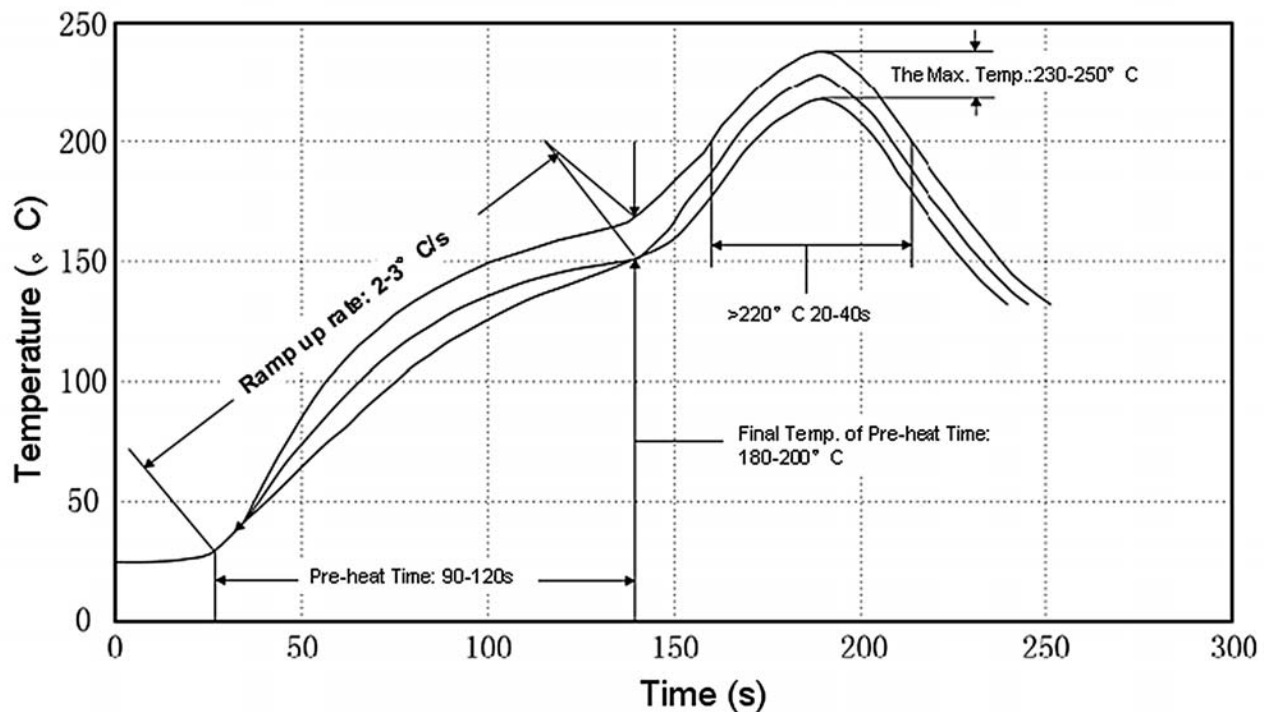
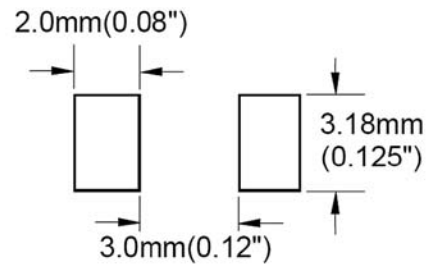
- Temperature: 260° C
- Time: 30 Seconds Maximum

### Hand Soldering

- Maximum tip temperature: 350°C
- Maximum soldering time: 5 seconds max

## Recommend Reflow Profile

## Recommended Pad Layout



## Packaging Code

Packaging Code Suffix	Description
-TR1	1000 Fuses in Tape and Reel on 7 inch (178mm) diameter reel
-TR2	5000 Fuses in Tape and Reel on 13 inch (330mm) diameter reel

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