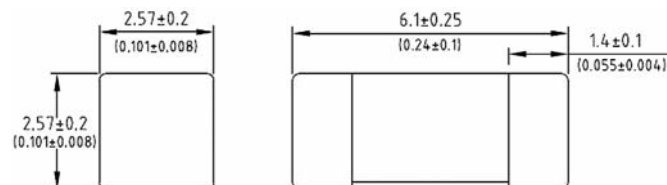


# Fast-Acting SMD Brick™ Fuses CB61F Series



## 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	

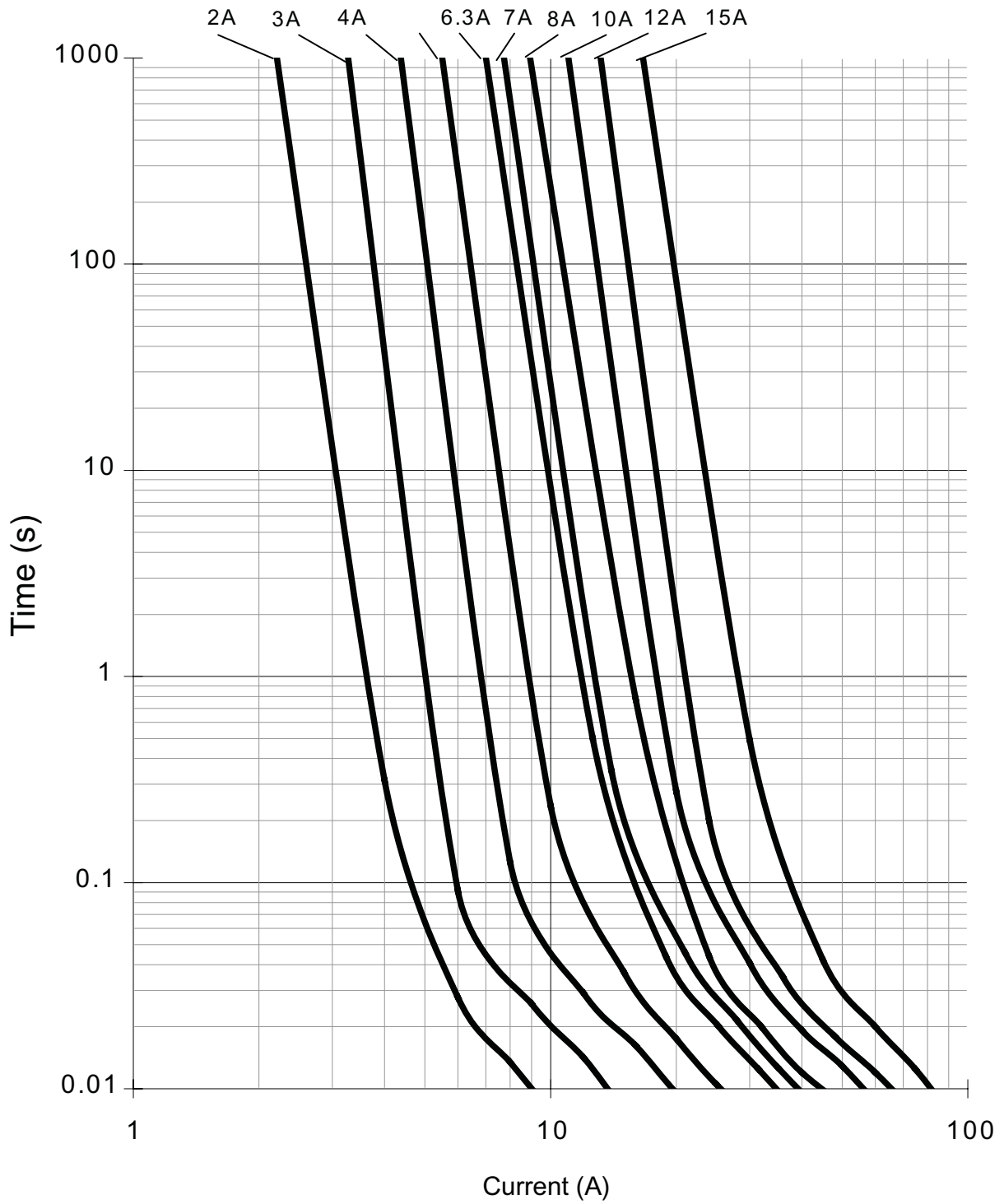
\* AC Interrupting Rating (measured at designated voltage, 100% power factor); DC Interrupting Rating (measured at designated voltage, time constant of less than 50 microseconds, battery source)

\*\* 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

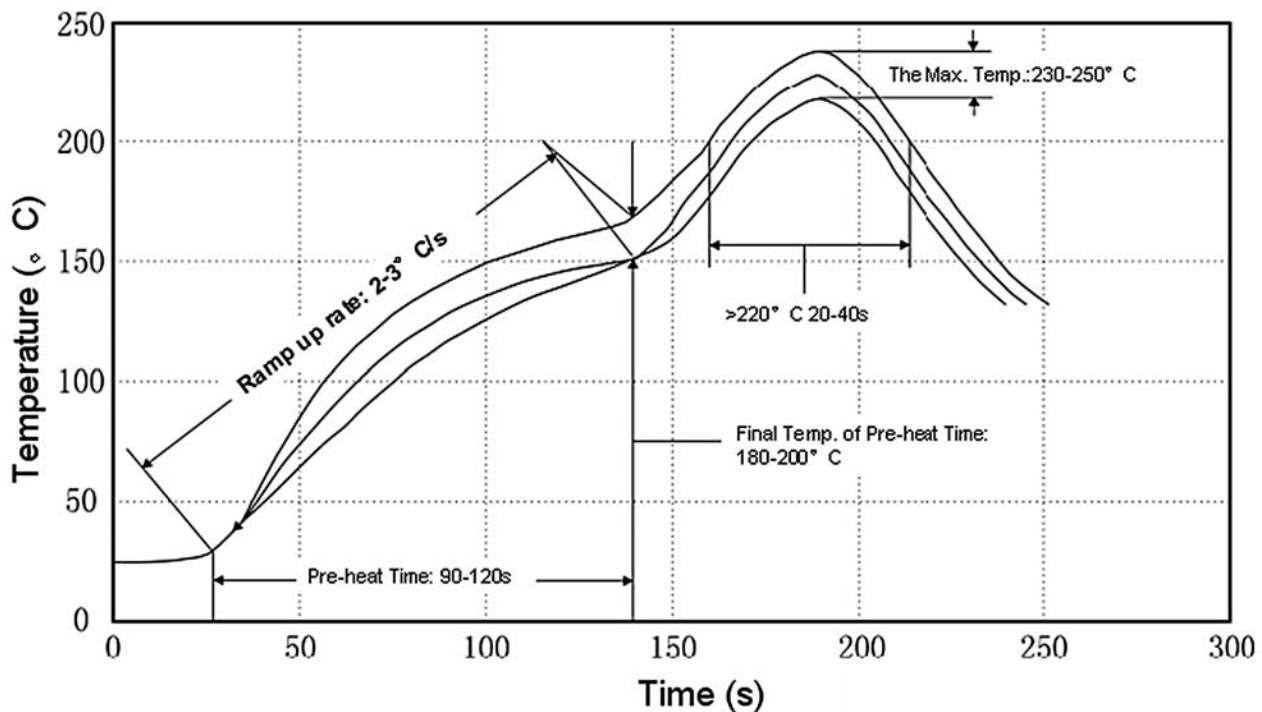
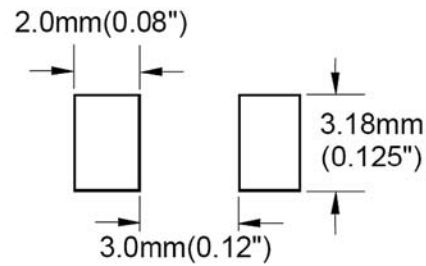
- Temperature: 260° C
- Time: 30 Seconds Maximum

#### 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

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Life Support Policy: Cooper Bussmann does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.