

CB61F

Fast-acting surface mount Brick™ fuses



Product features

- High Interrupting Ratings: 50 A @ 125 Vac / 300 A @ 125 Vdc
- Wide Selection: 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

Agency information

- cULus: Standard UL 248-14, Guide JDYX, File E 19180 and Guide JDYX7, File E19180
- PSE: JET1641-31007-1010 (2A-5A), JET1641-31007-1012 (6.3A-10A), JET1641-31007-1011 (12-15A)
- CQC: CQC09012040316 (2A-6.3A & 8A-10A)

Ordering

- Specify product and packaging code

Applications

Primary circuit protection:

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

General specifications

- 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 (10-55 Hz, 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)
- Operating temperature: -55 °C to +125 °C (with derating)

Specifications											
Catalog number	Current ratings (A)	Voltage ratings		Interrupting ratings (A)*		Typical cold resistance (Ω)**	Typical melting I ² t (A ² s)***	Typical voltage Drop (mV)‡	Agency approvals		
		Vac	Vdc	125 Vac	125 Vdc				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 I²t (measured with a battery bank at rated DC voltage, 10x-rated current, time constant of calibrated circuit less than 50 microseconds)

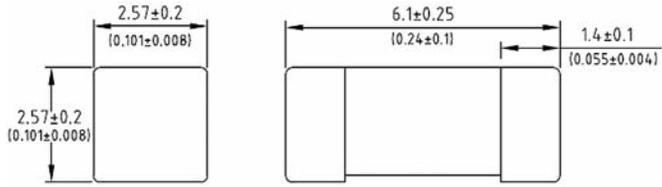
‡ Typical Voltage Drop (measured at rated current after temperature stabilizes)



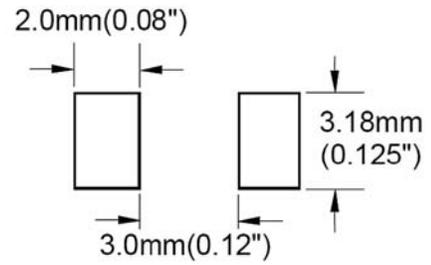
Powering Business Worldwide

Dimensions - mm

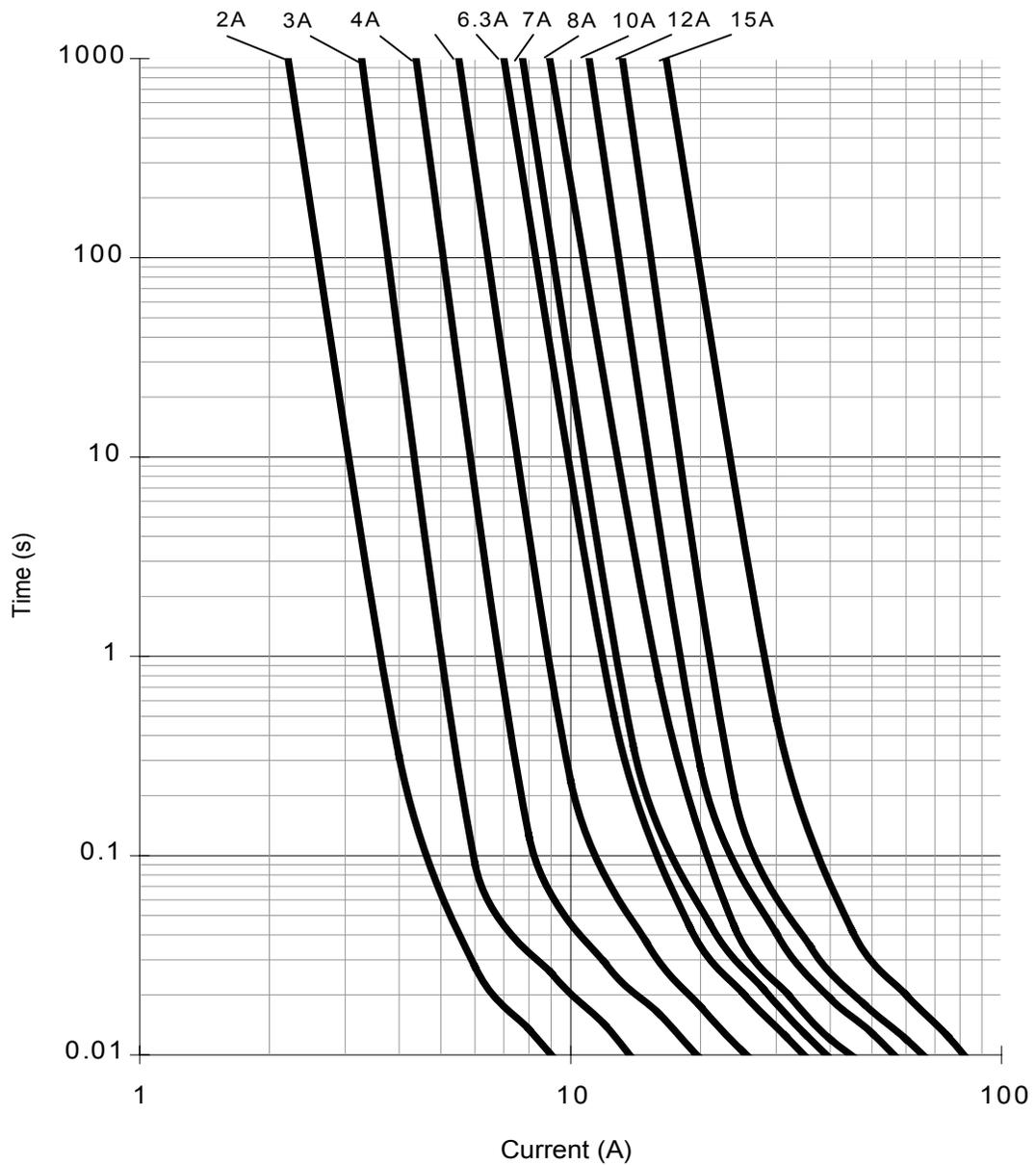
Drawing Not to Scale



Recommended pad layout



Time-current curves



Soldering Characteristics

Wave Immersion

- Reservoir Temperature: +260 °C
- Time in Reservoir : 10 seconds maximum

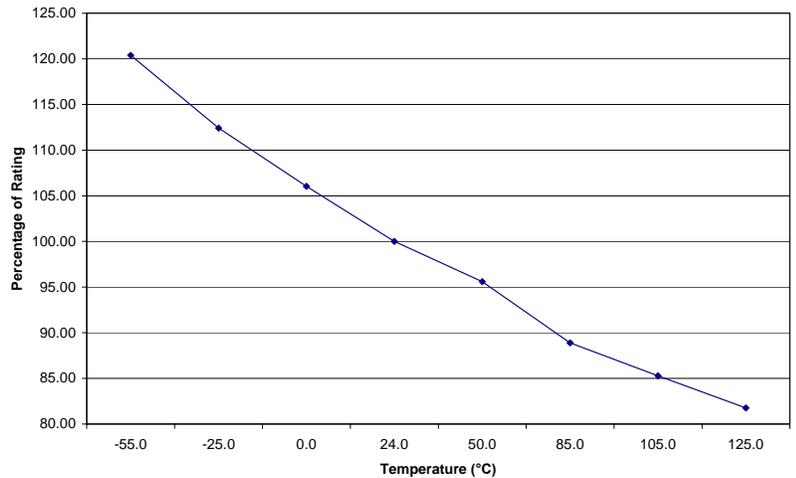
Infrared Reflow

- Temperature: +260 °C
- Time: 30 seconds maximum

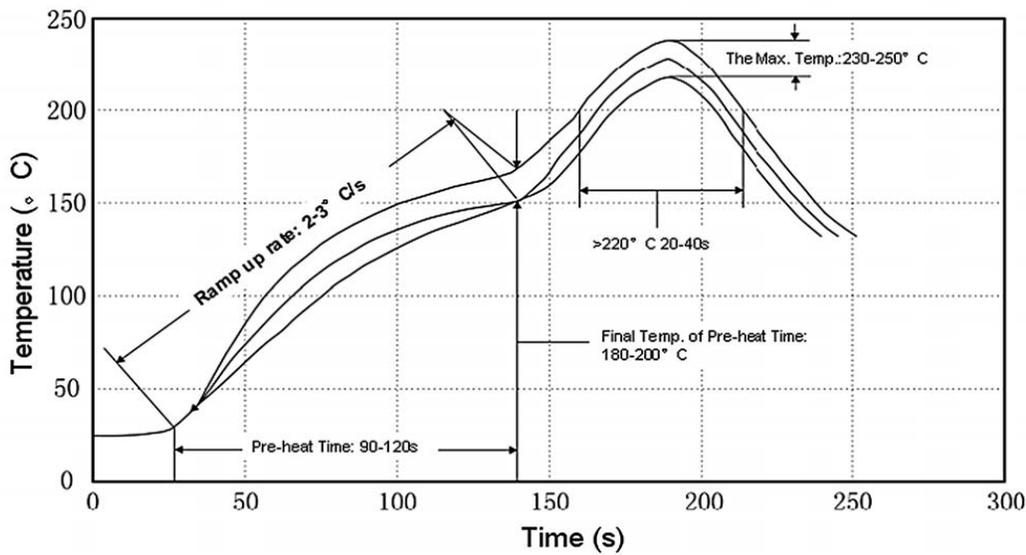
Hand Soldering

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

Derating curve



Recommend Reflow Profile



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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