

High Current Brick Fuse

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DLB45 - 60A



Description

- High inrush/surge current withstanding capability brick fuse
- Surface mountable high current fuse
- Very low cold resistance, temperature rise, and voltage drop



Benefits

- Single fuse solution for high current application
- Suitable for a wide variety of voltage requirement and application
- Enhances power efficiency
- Avoids nuisance opening due to high inrush and surge current inherent in the system; Can withstand below condition:
On 2.5In/0.3Sec; Off 4Sec; 5000 times cycle
- Compatible with high volume assembly requirement

Electrical Characteristics

Amp Rating	% of Amp Rating	Opening Time
60A	1.0 In	4 hour min.
	3.5 In	10s max.

Specifications

Part No.	Rated Voltage	Rated Current	Breaking Capacity	Typ. Cold Resistance	Typical Voltage Drop	Pre-Arcing I ² t
	(DC)	(A)	(DC) ¹	(mΩ)	(mV)	(A ² Sec) ²
DLB45-60A	85V 72V 63V	60	85Vdc @ 1500A 72Vdc @ 1000A 63Vdc @ 1000A ³	0.51	60	3100

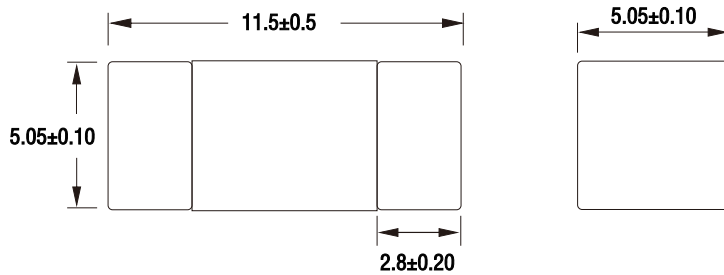
1. DC Interrupting Rating (Measured at designated voltage, time constant of less than 50 microseconds, battery source)
2. Typical Pre-arcing I²t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)
3. Self-certified for 85Vdc/1500A

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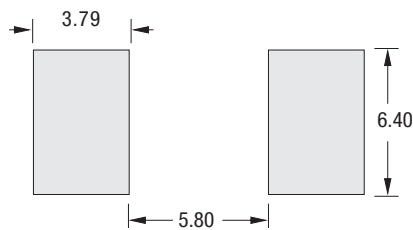
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Dimension

Unit: mm



Pad layout

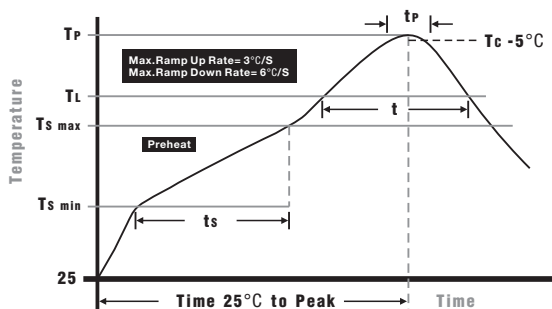


Recommend trace thickness is 3oz the minimum trace width is 22mm, 60A

Packaging

- Quantity: 1, 000pcs
- 24mm wide tape on 330mm (13 inch) diameter reel -specification EIA Standard 481.

Soldering Parameters



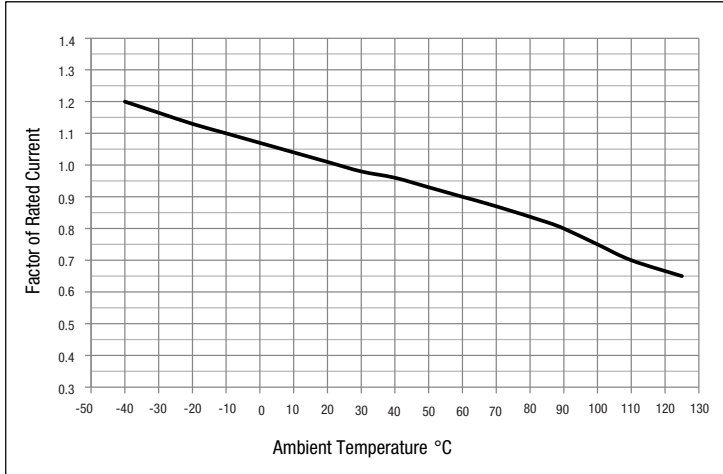
Wave Soldering: 260°C, 10 seconds max.
Infrared Reflow: 260°C, 30 seconds max.

IR Reflow Profile

Preheat Heat	
Temperature min (T _{smin})	150°C
Temperature max (T _{smax})	200°C
Time (T _{smin} to T _{smax}) (t _s)	60 - 120 seconds
Average ramp-up rate (T_{smax} to T_p)	3°C/second max.
Liquidous temperature (T_L)	217°C
Time at liquidous (t _L)	60 - 150 seconds
Peak temperature (T_p)	260+0/-5°C
Time within 5°C of actual peak Temperature (t_p)	10 - 30 seconds
Average ramp-down rate (T_p to T_{smax})	6°C/second max.
Time 25°C to peak temperature	8 minutes max.

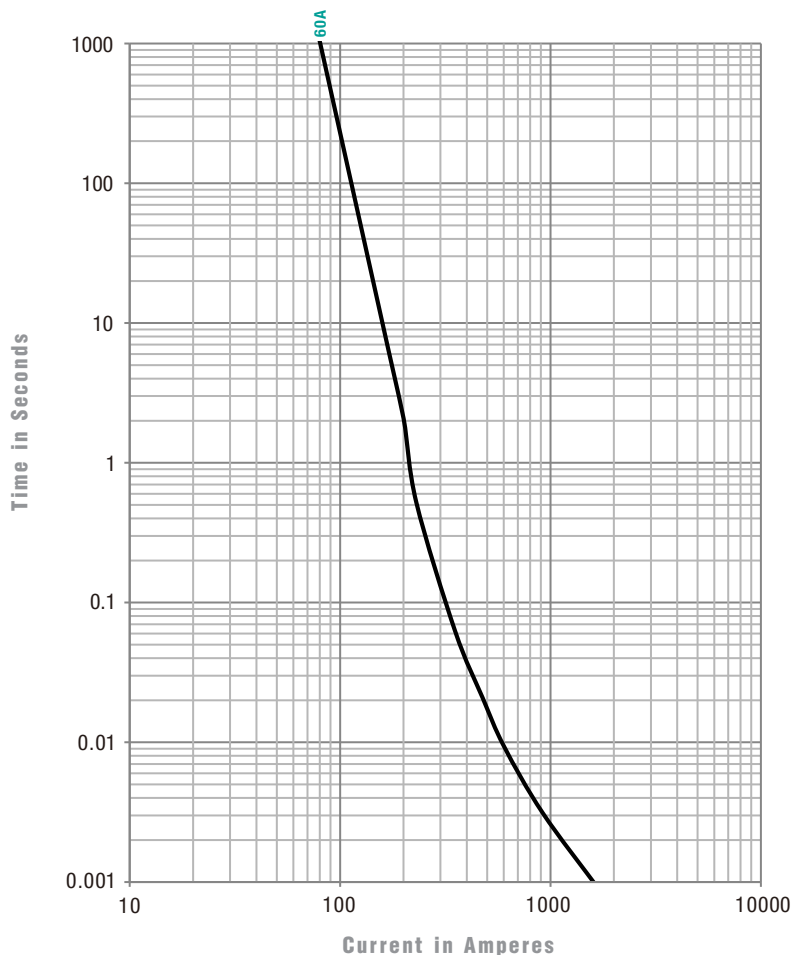
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Temperature Re-rating Curve



- Normal Operating Temperature: 25°C± 2°C
- Operating Temperature: -40°C to 125°C with proper correction factor applied.
- Chart of correction factor.

Time-Current Curves



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