

High Current Brick Fuse Ampere Rating 40-100A

DHC49 Series







Descriptions

- · Fast Acting High current brick fuse
- · Surface mount deign to save space
- Ceramic Sugare body with end cap design
- Designed to UL248-1/14



Applications

- Power battery protection
- Test equipment
- Power supplies
- Game systems
- Industrial equipment
- Telecom system

Electrical Characteristics

Amp Rating	% of Amp Rating	Opening Time	
40~100A	1.0 ln	4 hour min.	
	2.5 ln	10s max.	

Specifications

Part No.	Rated Current (A)	Rated Voltage (V)	Breaking Capacity DC ¹	Typ. Cold Resistance (mΩ)	Typical Voltage Drop (mV)	Pre-Arcing I ² t (A ² Sec) ²
DHC49-40A	40			1.2	67	1350
DHC49-50A	50	72V /dc		1.0	77	2050
DHC49-60A	60	85V /dc	1000A	0.79	72	3200
DHC49-70A	70			0.68	80	4800
DHC49-80A	80			0.56	70	6000
DHC49-100A	100	72V /dc		0.41	53	10500

^{1.} Typical Pre-arcing I2t are measured at 10In Current

^{2.} Internal qualification for 85Vdc

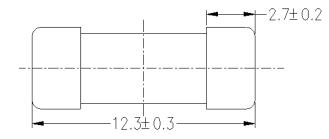


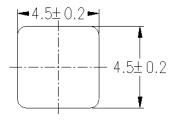




Dimension

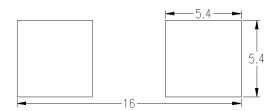
Unit: mm



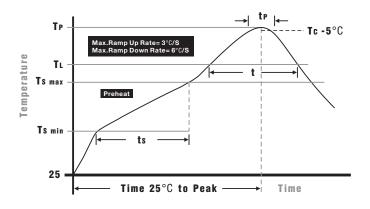


Pad layout

Unit: mm



Soldering Parameters



Soldering Characteristics

Reflow Soldering

• Temperature: 260°C

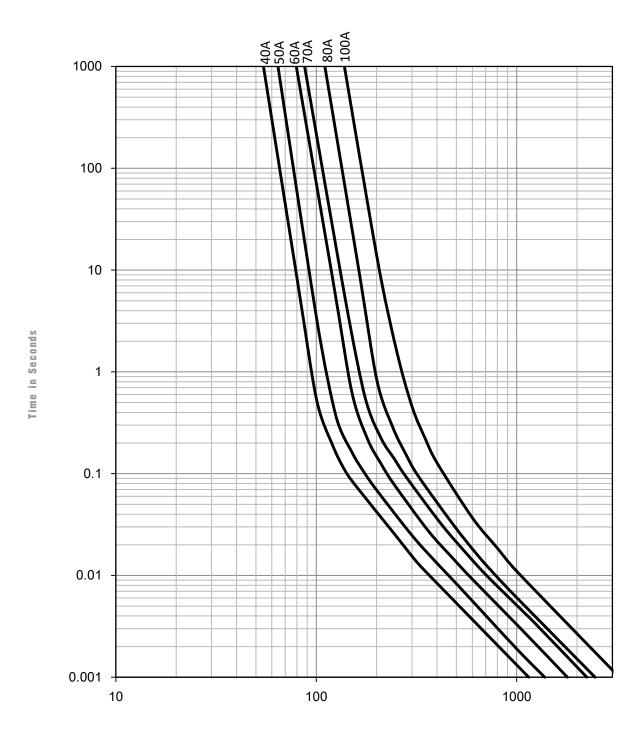
• Time: 30 Seconds Maximum

IR Reflow Profile

Preheat Heat Temperature min (Tsmin) Temperature max(Tsmax) Time (Tsmin to Tsmax) (ts)	150°C 200°C 60 -120 seconds		
Average ramp-up rate (Tsmax to Tp)	3°C/second max.		
Liquidous temperature (TL) Time at liquidous (tL)	217°C 60 - 150 seconds		
Peak Package body temperature(Tp)	260°C		
Time within 5°C of actual peak Temperature (tp)	30 seconds		
Average ramp-down rate (Tp to Tsmax)	6°C/second max.		
Time 25 °C to peak temperature	8 minutes max.		



Time-Current Curves

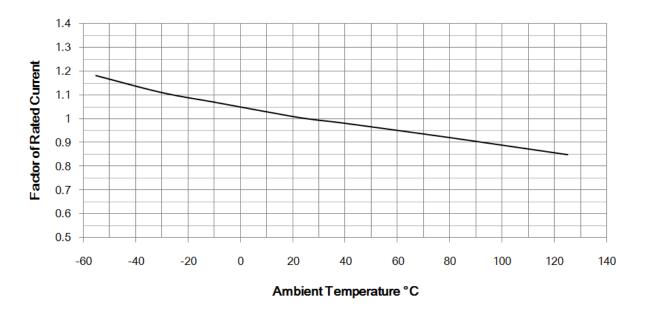


Current in Amperes

High Current Brick Fuse

DHC49 Series

Temperature Re-rating Curve



- Normal Operating Temperature: 25°C± 2°C
- o Operating Temperature: -55°C to 125°C with proper correction factor applied.
- Chart of correction factor.

Packaging

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

> © 2021 PROSEMI Inc. All Rights Reserved. Specifications and features are subject to change without notice. www.prosemitech.com

The PROSEMI logo, and all other PROSEMI trademarks are the property of PROSEMI Inc. All other trademarks are the property of their respective owners.