

## 50 Watt, DHS-B Series, DC-DC Converter (Single Output)

**ALL PSU LTD**  
Electronic Power Solutions

- High Input Range
- Regulated Outputs
- 3000V Isolation
- Industry Standard Encapsulated Package
- Quarter Brick
- Over Voltage and Current Protection
- High Efficiency up to 83%
- -40 to +100 °C Operational Temperature Range



### Specification (typical values shown)

Input Range.....	200~400 Volts
Outputs.....	Single (see table below plus trim range)
Start Up Time.....	200ms max
Line Regulation.....	0.2%
Load Regulation.....	0.2%
Efficiency.....	See table for each model
Over Current Protection.....	above 105% of nominal rated output, automatic recovery
Isolation Voltage.....	I/P~O/P: 3000 VDC
Operating Temperature.....	-40 to +100 °C
Storage Temperature.....	-40 to +100 °C
Approval.....	UL60950-1, cUL, EN60950-1
Case Material.....	Aluminium baseplate, PBT Case
Weight.....	60 g

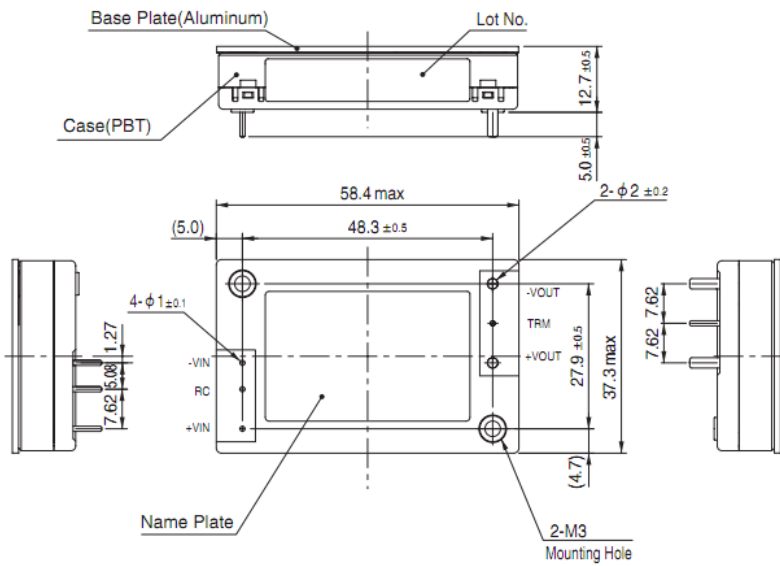
### Models and Ratings

Model	Input Range	Output Voltage	Output Current	Efficiency
DHS50B03	200~400 VDC	3.3 V	10.0 A	77%
DHS50B05		5.0 V	10.0 A	80%
DHS50B12		12.0 V	4.2 A	83%
DHS50B15		15.0 V	3.4 A	83%
DHS50B24		24.0 V	2.1 A	83%
DHS50B28		28.0 V	1.8 A	82%

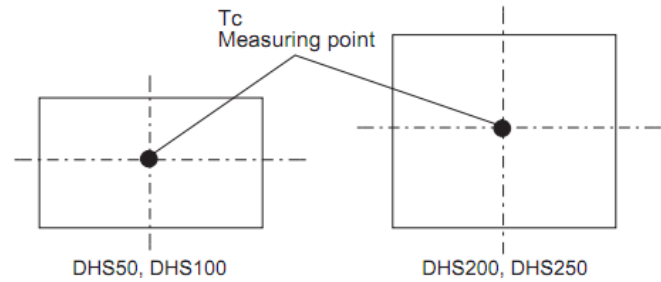
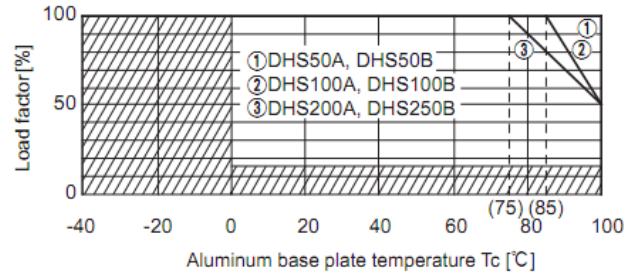
For mechanical data and pinout, see next page

ALL PSU Ltd, Unit D6 Laser Quay, Culpeper Close, Medway City Estate,  
Rochester, Kent, ME24HU, Tel : 01634 725527, Fax : 01634 739111,  
Email : [sales@allpsu.co.uk](mailto:sales@allpsu.co.uk) , Web : [www.allpsu.co.uk](http://www.allpsu.co.uk)

## Mechanical Details and Pin-Out



## Derating Curve



## Addition of a Heat sink :

These DC-DC Converters work with conduction cooling and therefore needs heat dissipation using heat sinks. Optional heat sinks are available for the DHS Series, please see table below

Model	Size (mm)			Thermal Resistance (°C/W)		Style
	H	W	D	Convection (0.1m/s)	Forced Air	
F-QB-F1	12.7	58.4	37.6	14.0	See Graph Below	Horizontal
F-QB-F2	12.7	58.7	37.3			Vertical
F-QB-F3	25.4	58.4	37.6	7.5		Horizontal
F-QB-F4	25.4	58.7	37.3			Vertical
F-QB-F5	38.1	58.4	37.6	5.0		Horizontal
F-QB-F6	38.1	58.7	37.3			Vertical

