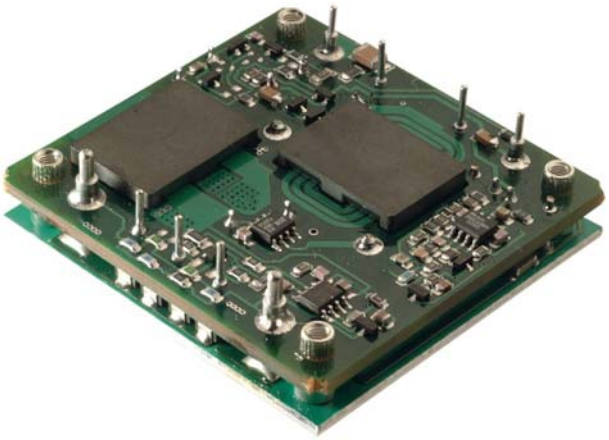
**Product Brief**

# HHS40 Series – 40A Half-Brick DC/DC Converter
# 48V Input
# 3.3V, 2.5V Output



## Features

- Open frame design with Insulated Metal Substrate
- Low profile – 12.7 mm height
- Input/output isolation: 1500VDC, meets basic insulation requirements
- Efficiency in excess of 90%
- Output back-drive capability
- Low conducted and radiated EMI
- Output over-current protection
- Output over-voltage protection
- Over-temperature protection
- Remote sense
- Set point accuracy ± 2%
- Remote on/off (primary referenced), positive or negative logic
- Output voltage trim, positive or negative
- UL 1950 Recognition, CSA 22.2 No. 950-95 certification, TUV IEC950

## Applications

- Distributed power architectures
- Telecommunications equipment
- LAN/WAN applications
- Data processing applications

## Description

The HHS40 is a series of high-density **H**alfbrick size, **H**igh-current, **S**ingle-output DC/DC converters with through-hole mounting. The products provide on-board conversion of standard Telecom and Datacom input voltages to isolated, precisely regulated low output voltages. Very high efficiency and superior thermal design enable the products to deliver full rated power at 55° C with 300 LFM or 45° C with 200LFM forced air without addition of a heatsink. Such level of performance is presently not matched by other 40A rated products on the market.

**Selection Chart**

| Model | Input voltage VDC | Input current, max, ADC | Output voltage, VDC | Output rated current, ADC | Output Ripple/ Noise, mV p-p | Typical Efficiency @40A % |
|---|---|---|---|---|---|---|
| HHS40ZE | 36-75 | 5.0 | 3.3 | 40 | 150 | 90 |
| HHS40ZD | 36-75 | 3.5 | 2.5 | 40 | 100 | 88 |

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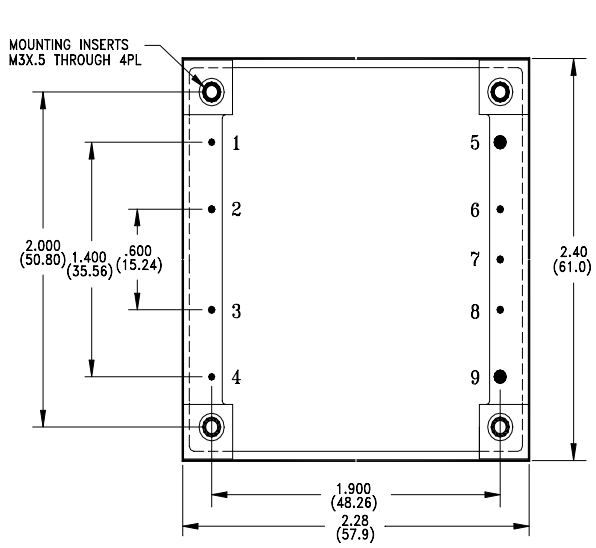
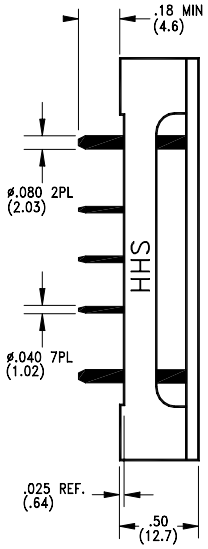
## Mechanical Drawing




Bottom (Pin) View




Side View

| Pin # | Function |
|---|---|
| 1 | -Vin |
| 2 | Case |
| 3 | ON/OFF |
| 4 | +Vin |
| 5 | -Vout |
| 6 | -Sense |
| 7 | Trim |
| 8 | +Sense |
| 9 | +Vout |

Tolerances: .xx ± .020 (.5)
.xxx ± .010 (.25)
Pin diameter ± .0.002 (.05)

## Ordering Information

| Options | Suffixes to add to part number |
|---|---|
| Remote On/Off | Positive- Standard, no suffix required |
| | Negative- Add “N” suffix |
| Trim | Negative- Standard, no suffix required |
| | Lucent compatible- Add “T” suffix |
| Pin Length | 0.18”- Standard, no suffix required |
| | 0.11”- Add “8” suffix |
| | 0.15”- Add “9” suffix |

## Notes

1. Consult factory for the complete list of available options.
2. Power-One products are not authorized for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems without the express written consent of the President of Power-One, Inc.
3. Specifications are subject to change without notice.