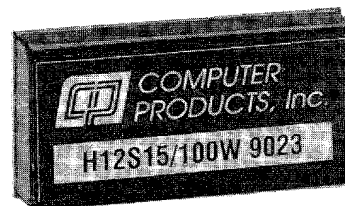


H SERIES

Single Output

1 Watt DC/DC Converters

- Low .38 Inch Profile
- Six-Sided Continuous Shield
- 500 VDC Isolation
- Low-Power Economy Series
- OVP on 5V Output
- High Reliability



The H Series of low-power PC-mountable DC/DC converters provide premium performance and reliable operation at economical prices. The units provide 1 watt of total output power. All models are encapsulated in miniature 1.0 × 2.0 × 0.38 inch metal cases that provide EMI/RFI protection plus easy installation where space is limited. The H Series is available in 5VDC output models with line and load regulation within 1.0%.

The units feature 500 VDC minimum isolation and less than 4 mV RMS (50 mV P-P) output ripple and noise. They require no derating up to 71°C. Output short-circuit protection is standard for all models in the H Series, with over-voltage protection included. These DC/DC converters are ideally suited for applications where sensitive circuitry must be isolated from the main power bus and associated noise.

SPECIFICATIONS

All specifications typical at nominal line, full load, and 25°C unless otherwise noted.

Output Specifications

| | |
|--|-----------------------------------|
| Voltage Accuracy | ±4.0%, max. |
| Ripple and Noise, 20 MHz BW | 4 mV RMS, max. 50 mV P-P, max. |
| Temperature Coefficient | ±0.05%/°C, max. |
| Voltage Stability, 24 Hours | ±0.2% max. |
| Transient Recovery Time, ±0.5% Error Band | |
| FL-NL | 75 μsec., max. |
| FL-1/4L | 25 μsec. max. |
| Short Circuit Protection, 30 Seconds, max. | Output to Common |
| Overvoltage Protection | 6.8 VDC |

Input Specifications

| | |
|---------------------|----------------|
| Input Voltage Range | |
| (5V input) | 4.5 – 5.5V |
| (12V input) | 10 – 14.5V |
| (24V input) | 20 – 28V |
| (48V input) | 42 – 56 V |
| Input Filter | Capacitor Type |

General Specifications

| | |
|----------------------|--|
| Isolation Voltage | 500 VDC, min. |
| Isolation Resistance | 10 ⁹ ohms, min. |
| Switching Frequency | 20 kHz |
| EMI/RFI | Six-Sided Continuous Metal Case |
| Weight | 1.1 oz. (31 grams) |
| Case Material "W" | Black Coated Copper with Non-conductive Base |
| Case Material "R" | Plastic |
| Mating Socket | MS-W |

Environmental Specifications

| | |
|-----------------------------|---------------------|
| Operating Temperature Range | –25°C to +71°C |
| Derating | None |
| Storage Temperature Range | –55°C to +85°C |
| Cooling | Free-Air Convection |

| Input Voltage | Output Voltage | Output Current | Input Current | | % Eff | Regulation ⁽¹⁾ | | Case | Model Number ⁽⁴⁾ |
|---------------|----------------|----------------|---------------|-----------|-------|---------------------------|---------------------|------|-----------------------------|
| | | | No Load | Full Load | | Line ⁽²⁾ | Load ⁽³⁾ | | |
| 5 VDC | 5 VDC | 200 mA | 100 mA | 480 mA | 42 | ±1% | ±1% | W | H05S05/200W |
| 12 VDC | 5 VDC | 200 mA | 25 mA | 200 mA | 42 | ±1% | ±1% | W | H12S05/200W |
| 24 VDC | 5 VDC | 200 mA | 15 mA | 100 mA | 42 | ±1% | ±1% | W | H24S05/200W |
| 48 VDC | 5 VDC | 200 mA | 15 mA | 52 mA | 40 | ±1% | ±1% | W | H48S05/200W |

Notes:

(1) Maximum.

(2) Measured from High Line to Low Line.

(3) Measured from Full Load to No Load.

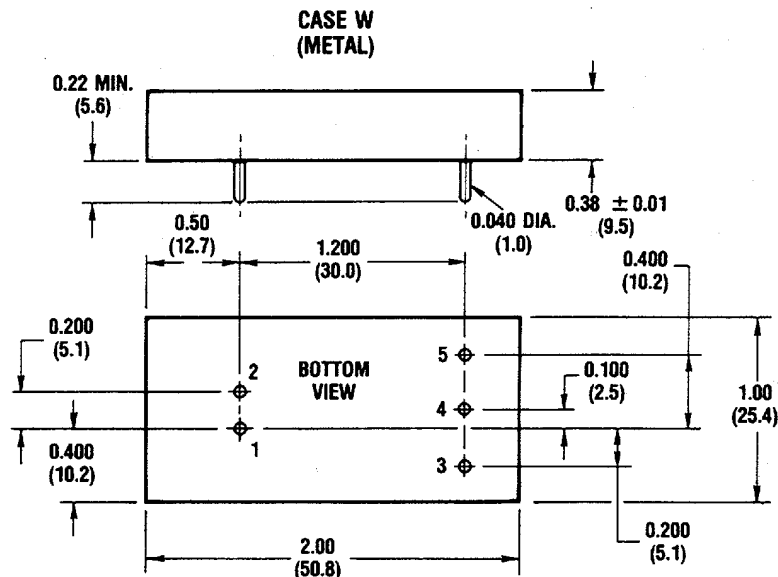
(4) Models numbers listed are for copper case. For plastic case, order model numbers:

H05S05/200R

H12S05/200R

H24S05/200R

H48S05/200R



ALL DIMENSIONS IN INCHES (mm)

Tolerance .xx = ± 0.04

$$.xxx = \pm 0.005$$

Pin Connections

| <i>Pin</i> | <i>Function</i> |
|-------------------|------------------------|
| 1 | + Input |
| 2 | – Input |
| 3 | + Output |
| 4 | No Pin |
| 5 | – Output |