

# HUA/HUD Series



## DC/DC

### 3.75 to 12 Watts

Single/Dual Outputs

- MOSFET design
- Efficiency to 80%
- MTBF in excess of 1,000,000 hours
- Pi input filter
- Operating temperature range: -25°C to +71°C; No derating

## Specifications

### INPUT

Voltage Range	4.5 - 5.5 Vdc
Filtering	Pi

### OUTPUT

Voltage Tolerance	± 3%
Ripple and Noise (PARD)	30mV RMS
Short Circuit Protection	Short term
Temperature Coefficient	0.02% / °C

### GENERAL

Regulation:	
Line	1% / % Vin (typ.)
Load	See Load Curve
Efficiency	80% (typ)
I/O Isolation	500 Vdc
Switching Frequency	40kHz

### ENVIRONMENTAL

Operating Temperature	-25°C to +71°C No Derating
Storage Temperature	-25°C to +85°C
Cooling	Free-air Convection

All specifications are typical at nominal line and full load at 25°C unless otherwise noted and are subject to change without notice.

The HUA/ HUD is a cost-effective series of DC/DC converters, offering both single and dual outputs. These unregulated converters offer the latest in MOSFET technology. Featuring efficiencies to 80%, cool operating case temperatures and a high level of reliability with a MTBF in excess of 1,000,000 hours. Additional standard features include an internal Pi filter, 500 Vdc I/O isolation, up to 12 watts of output power and operating temperature of -25°C to +71°C with no derating. All this in a package measuring 2.0" x 2.0" x 0.40" high.

### Applications

The HUA/HUD Series is ideally suited for many analog and digital applications in process control, microprocessors, telecommunications and automatic test equipment



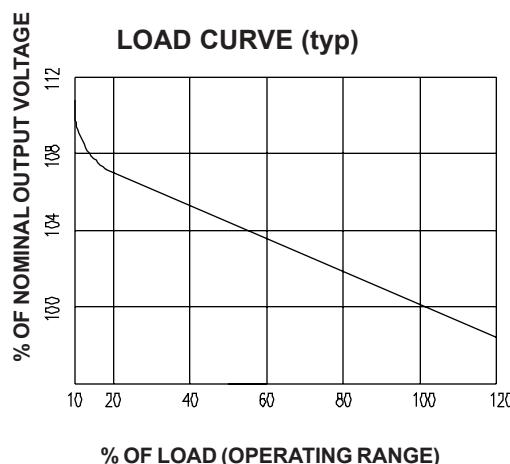
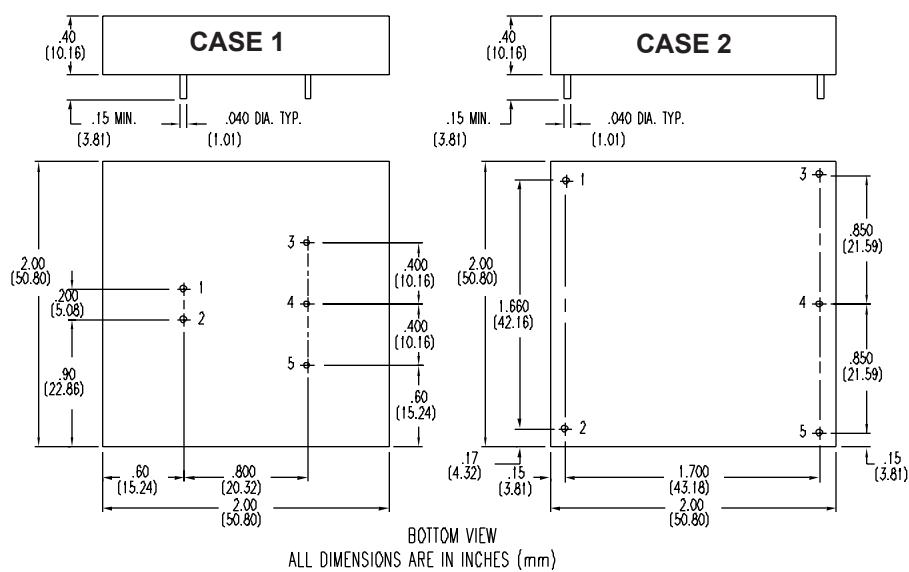
SEMICONDUCTOR  
CIRCUITS, INC.

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# HUA/HUD Series Ordering Information

Input Voltage Range	Output Voltage	Output Current	Case 1 Model Number	Case 2 Model Number
4.5-5.5 Vdc	5Vdc	750mA	HUA11-075-05	HUD11-075-05
4.5-5.5 Vdc	12Vdc	600mA	HUA12-060-05	HUD12-060-05
4.5-5.5 Vdc	12Vdc	800mA	HUA12-080-05	HUD12-080-05
4.5-5.5 Vdc	15 Vdc	600mA	HUA13-060-05	HUD13-060-05
4.5-5.5 Vdc	15 Vdc	800mA	HUA13-080-05	HUD13-080-05
4.5-5.5 Vdc	$\pm$ 12 Vdc	$\pm$ 300mA	HUA22-060-05	HUD22-060-05
4.5-5.5 Vdc	$\pm$ 12 Vdc	$\pm$ 400mA	HUA22-080-05	HUD22-080-05
4.5-5.5 Vdc	$\pm$ 15Vdc	$\pm$ 300mA	HUA23-060-05	HUD23-060-05
4.5-5.5 Vdc	$\pm$ 15Vdc	$\pm$ 400mA	HUA23-080-05	HUD23-080-05

## Dimensions and Connections



**PIN CONNECTIONS**  
**Single Output**  
 1. + Input  
 2. - Input  
 3. + Output  
 4. No Connect  
 5. - Output

**PIN CONNECTIONS**  
**Dual Outputs**  
 1. + Input  
 2. - Input  
 3. + Output  
 4. Common  
 5. - Output

**NOTES:**  
 1. Pins 0.040 (1.0) Dia. x 0.15 (3.8) lg min.  
 2. All dimensions are in inches and (mm).  
 3. Ripple measured with a 3.3mf tantalum capacitor across each output.

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