50 Watt HW Series



Shindengen America, Inc.

FEATURES

- Wide-Range Input Voltage
- Industry-Standard Pin Out
- Adjustable Output Voltage (60% 110%)
- Remote ON/OFF
- Remote Sense
- Constant Frequency
- Thermal Shutdown
- High Power Density (Up to 36.5 W/in³)

SPECIFICATIONS

INPUT

Voltage/Current See Model Selection Table

Max. Input Current 6.0 A

 $(V_{in} = 0 \text{ to } 72 \text{ VDC})$

Max. Inrush Transient 2.0 A2s

Reflected Ripple Current 20 mA (peak-to-peak)

Ripple Rejection 60 dB

OUTPUT

Output Voltage See Model Selection Table

Set Point ±1%

Regulation

Line 0.01% (typ.) Load 0.05% (typ.l)

Ripple (RMS)

3.3V, 5V 40 mV 12V, 15V 80 mV

Noise (peak-to-peak)

3.3V, 5V 100 mV 12V, 15V 150 mV

(measured with a 20 MHz bandwidth)

Temperature Drift ±0.01%/°C

Overvoltage Protection 120%

Current Limit Inception 115%

Short Circuit Current 130%

Efficiency See Model Selection Table

Isolation

 $\begin{array}{ll} \mbox{Voltage} & 500 \mbox{ VDC} \\ \mbox{Capacitance} & 2000 \mbox{ pf} \\ \mbox{Resistance} & > 10 \mbox{ M}\Omega \end{array}$

ENVIRONMENTAL

Operating Case Temp. $-40 \text{ to } +100^{\circ}\text{C}$ Storage Temp. $-40 \text{ to } +110^{\circ}\text{C}$

MECHANICAL

Size (W x D x H) 2.40 x 2.28 x 0.50 inches

(61 x 58 x 13 mm)

Weight 3.5 oz. (99 g)

See drawing on page 110

MODEL SPECIFICATIONS

Output		Input Range			
Volts	Amps	24 (18-36) VDC		48 (36-72) VDC	
		Model	Effic.	Model	Effic.
2.0 VDC	0 - 10A	HWE02010	70%	HWG02010	71%
3.3 VDC	0 - 10A	HWE03010	78%	HWG03010	80%
5.0 VDC	0 - 10A	HWE05010	82%	HWG05010	85%
12.0 VDC	0 - 4.17A	HWE124R2	85%	HWG124R2	87%
15.0 VDC	0 - 3.33A	HWE153R3	85%	HWG153R3	88%
24.0 VDC	0 - 2.08A	HWE242R1	85%	HWG242R1	88%