

# H HITRON

2007/09/18

# CHASSIS-MOUNT UNIVERSAL INPUT AC-DC ENCAPSULATED MODULAR POWER SUPPLIES 50 WATTS SINGLE OUTPUT HAS50S SERIES



#### **FEATURES:**

- CHASSIS-MOUNT AC/DC MODULAR POWER SUPPLIES
- UNIVERSAL AC INPUT RANGE
- **COMPACT IN SIZE**
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB.22 / FCC CLASS B
- CE MARKING COMPLIANCE

# **SPECIFICATION**

# INPUT SPECIFICATION

Input Voltage: 90-264Vac typical. Nominal: 115/230Vac. Input Frequency: 47-63 Hz. (Nominal 50/60 Hz.) Input Current: 0.77A @115Vac./0.39A @230Vac. Inrush Current: 34A(peak) or 4.8(rms)@230Vac typical.

**Input Fuse:** Use internal fuse.

Dielectric Withstand: Meet IEC950.

3,000Vac-Output/Input. 1,500Vac-Input/GND. 500Vac-Output/GND.

EMI: Meet CISPR PUB.22 / FCC Class B.

Hold-up time: 19 mS @115Vac, 80mS @230Vac typical.

Earth Leakage: Less than 0.52mA @230Vac.

Remote On/Off:

**ON**(Enable)=Open. **OFF**(Disable)=Short.

### **OUTPUT SPECIFICATION**

Output Voltage: See Ratings Chart. Output Current: See Ratings Chart Output Wattage: 50 Watts typical.

**Line Regulation:** Various with output voltage.

0.1-0.5% typical.

**Load Regulation:** Various with output voltage.

 $\pm 1.0 - 2.0\%$  typical.

Noise & ripple: 1.0% typical peak to peak.

**OVP:** Built-in on main output.

Adjustability: Available at main output.

**Overload Protection (OLP):** 

Fully protected against output overload and short circuit.

Typical 120-150% max. load.

Consult the factory for special OLP setting.

#### **GENERAL SPECIFICATION**

**Efficiency:** 72%-85% typical various with output voltage.

Switching Frequency: 63K Hz.

Circuit Topology: Fixed Frequency Flyback circuit. Transient Response: Peak deviation 200mV, Recovery time <3mSec. @ 25% step load change.

Case: Impact resistant thermo-plastic enclosure.

Safety Standard: EN60950/ UL1950 Class I or Class II.

**Power Density:** 4.1 Watts. / Cubic inch. **MTBF:** 110,000Hrs. Mil Std 217, 25°C.

**Operating Temperature:** -10°C to +75°C range. -10°C to +50°C @ full load without derating. From+50°C derating linearly to half load @+75°C (Refer to the Derating Chart).

**Storage Temperature:** -20°C to +85°C. **Temperature Coefficient:** ± 0.03% /°C.

**Cooling:** Convection cooling for <+50°C @ full load. At least 100LFM moving air is recommended for full load >+50°C in a confined area.

Commercial Grade only.

NOTE: (1) All measurements are at nominal input, full load, and +25°C unless otherwise specified.

(2) Load Regulation measured from Full-Load (F-L) to Half-Load (H-L) at nominal input and others loaded at half load.







In application

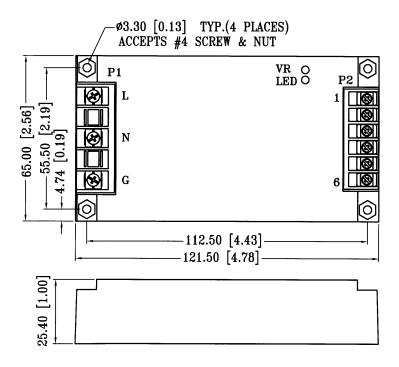
# **OUTPUT VOLTAGE/ CURRENT RATINGS CHART**

# SINGLE OUTPUT

MODEL NO.	MAIN O/P VO1 @ ★	
	TYP.	VOLT.
HAS50-S033075	7.5A	+3.3V
HAS50-S050060	6.0A	+5.0V
HAS50-S120042	4.2A	+12.0V
HAS50-S150035	3.5A	+15.0V
HAS50-S240021	2.1A	+24.0V

**Symbols:** "★" OVP built-in. "@" Adjustable.

# **MECHANICAL DIMENSIONS: MM [INCHES]**



# **PIN ASSIGNMENT**

PIN NO.	SINGLE O/P
P1-L	AC-L
P1-N	AC-N
P1-G	AC-G
P2-1	REMOTE ON/OFF
P2-2	NC
P2-3	+VO1
P2-4	+VO1
P2-5	DC COM
P2-6	DC COM

**WEIGHT:** 378.0g (13.3 Oz.)

# **DERATING CHART**

