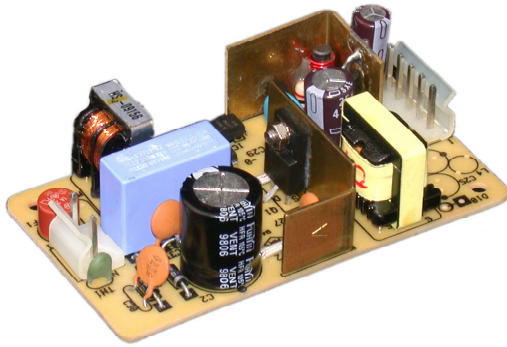


HiTRON

UNIVERSAL INPUT AC-DC PCB OPEN FRAME SINGLE & DUAL OUTPUT 13-15 WATTS INTERNAL SWITCHING POWER SUPPLIES HVI13 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- LOW-PROFILE & COMPACT PCB FORMAT
- MEET UNIVERSAL SAFETY STANDARDS
- EMI MEET CISPR PUB. 22 & FCC CLASS B
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Range typ. 90-264Vac.
Rating 100 to 240Vac.

Input Connector: Molex # 5045.

Input Frequency: 47-63Hz

Inrush Current: Typ. 26.0A @230Vac.

Input Current: Typ. 0.30A @115Vac, 0.15A@230Vac.

Dielectric Withstand: Meet IEC 60950-1.

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

Hold-up Time: Typ. 10mS @115Vac, 40mS @230Vac.

Earth Leakage: Typ. 0.25mA @230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.

Output Current: See Ratings Chart.

Output Wattage: Typ. 13-15watts.

Output Connector: Molex # 5045.

Line Regulation: Typ. 0.1%.

Load Regulation: Main VO1 typ. $\pm 2.0\%$.
Aux. VO2 typ. $\pm 5.0\%$ (stacked on).

Noise & Ripple: Typ. 1.0% peak to peak.

OVP: Built-in at VO1 (Zener diode).

Adjustability: Available at VO1.

Overload Protection (OLP):
Fully protected against output overload and short circuit.
OLP set at about 125-150% rating output wattage.
Consult the factory for OLP setting.

GENERAL SPECIFICATION

Efficiency: Typ. 70-80%.

Switching Frequency: 40 KHz.

Circuit Topology: Fixed Frequency Flyback Circuit.

Transient Response: Output voltage returns in less than 3mS following a 25% load change.

Safety Standard: IEC 60950-1/UL 60950-1 Class II.

Operating Temperature: 0 to +50°C.

Storage Temperature: -20 to +85°C.

Temperature Coefficient: Typ. 0.04%/°C.

Cooling: Free air convection.

Construction: PCB open frame format.

Power Density: 2.12 Watts / Cubic Inch.

Note: Due to requests in market and advances in technology, specifications subject to change without notification.



OUTPUT VOLTAGE / CURRENT RATINGS CHART

SINGLE OUTPUT

| MODEL NO. | MAIN VO1 ★ | | |
|---------------|------------|-------|------|
| | Typ. | Volt | Peak |
| HVI13-S033030 | 3.0A | 3.3V | 3.7A |
| HVI13-S050028 | 2.8A | 5.0V | 3.4A |
| HVI13-S120012 | 1.2A | 12.0V | 1.5A |
| HVI13-S150010 | 1.0A | 15.0V | 1.2A |
| HVI13-S240006 | 0.6A | 24.0V | 0.8A |
| HVI13-S480003 | 0.3A | 48.0V | 0.4A |

DUAL OUTPUT

| MODEL NO. | MAIN VO1 ★ | | | AUX. VO2 † | | |
|-------------|------------|-------|------|------------|-------|------|
| | Typ. | Volt. | Max. | Typ. | Volt. | Max. |
| HVI13-D033I | 2.5A | +3.3V | 3.5A | 0.4A | +12V | 0.5A |
| HVI13-D033K | 2.5A | +3.3V | 3.5A | 0.3A | +15V | 0.4A |
| HVI13-D033M | 2.5A | +3.3V | 3.5A | 0.2A | +24V | 0.2A |
| HVI13-D050I | 2.0A | +5.0V | 2.5A | 0.4A | +12V | 0.5A |
| HVI13-D050K | 2.0A | +5.0V | 2.5A | 0.3A | +15V | 0.4A |
| HVI13-D050M | 2.0A | +5.0V | 2.5A | 0.2A | +24V | 0.2A |

Symbol: "★" OVP built-in. "†" Stacked on main output.

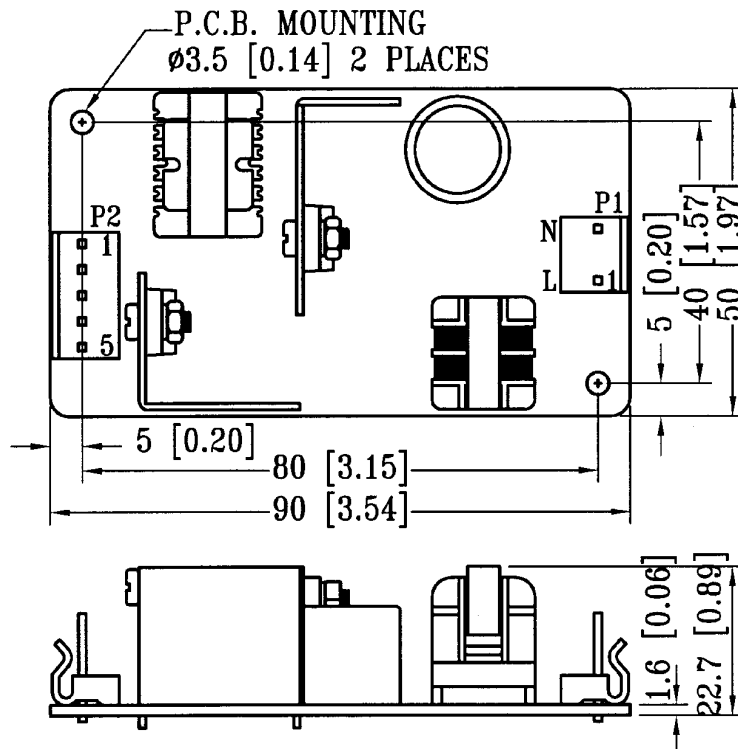
Remark: (1) At least 20% of typical main output current is required to maintain stated regulation.

(2) Peak output, less than 60 Sec. with 10% duty cycle.

(3) Max. current can't be drawn from all output at the same time.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 62.0g (2.19 Oz.)



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INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

| ASSIGNMENT | AC INPUT | | SINGLE OUTPUT | | DUAL OUTPUT | | |
|------------------|----------|------------|---------------|--------|-------------|------|--------|
| | AC-LINE | AC-NEUTRAL | +VO1 | DC-COM | VO1 | VO2 | DC-COM |
| CONNECTOR & PIN# | P1-L | P1-N | P2-4,5 | P2-1,2 | P2-4,5 | P2-3 | P2-1,2 |

Mating connector: Molex 5051series or equivalent.