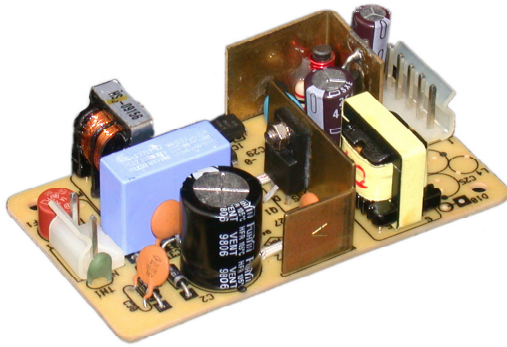


TOTAL POWER INT'L

UNIVERSAL INPUT AC-DC PCB OPEN FRAME SINGLE & DUAL OUTPUT 13-15 WATTS INTERNAL SWITCHING POWER SUPPLIES TPV113 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
TPVI13-S033030	3.0A	3.3V	3.7A
TPVI13-S050028	2.8A	5.0V	3.4A
TPVI13-S120012	1.2A	12.0V	1.5A
TPVI13-S150010	1.0A	15.0V	1.2A
TPVI13-S240006	0.6A	24.0V	0.8A
TPVI13-S480003	0.3A	48.0V	0.4A

DUAL OUTPUT

MODEL NO.	MAIN VO1 ★			AUX. VO2 †		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.
TPVI13-D033I	2.5A	+3.3V	3.5A	0.4A	+12V	0.5A
TPVI13-D033K	2.5A	+3.3V	3.5A	0.3A	+15V	0.4A
TPVI13-D033M	2.5A	+3.3V	3.5A	0.2A	+24V	0.2A
TPVI13-D050I	2.0A	+5.0V	2.5A	0.4A	+12V	0.5A
TPVI13-D050K	2.0A	+5.0V	2.5A	0.3A	+15V	0.4A
TPVI13-D050M	2.0A	+5.0V	2.5A	0.2A	+24V	0.2A

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

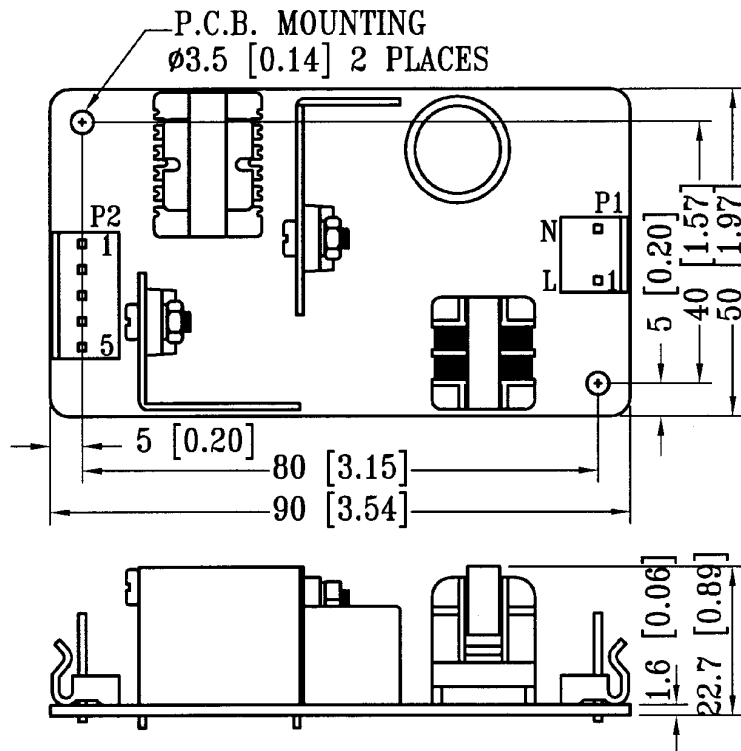
Remark: (1) At least 20% of typical main output current is required to maintain stated regulation.

(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.)



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.