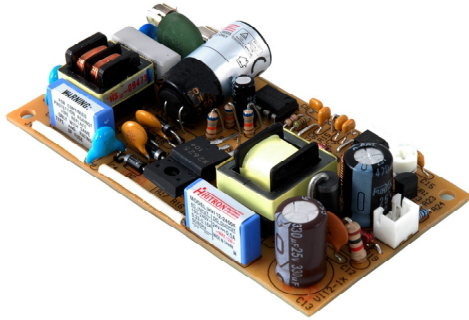


TOTAL POWER INT'L

UNIVERSAL INPUT AC-DC PCB OPEN FRAME SINGLE OUTPUT 12 WATTS INTERNAL SWITCHING POWER SUPPLIES TPVI12 SERIES



FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- LOW-PROFILE 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-NA or JST B3B-XH-A.

Input Frequency: 47-63Hz.

Inrush Current: Typ. 20A @230Vac.

Input Current: Typ. 0.34A @115Vac, 0.17A @ 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. 0.3mA @230Vac.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.

Output Current: See Ratings Chart.

Output Wattage: Typ. 10-12 Watts.

Output Connector: Molex 5045-NA or JST B3B-XH-A.

Line Regulation: Typ. 0.1%.

Load Regulation: Main VO1 typ. $\pm 1-2.0\%$.

Noise & Ripple: Typ. 1% peak to peak.

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

Adjustability: Available at main output 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. 70-75%.

Switching Frequency: Typ. 45K Hz.

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 I.

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: 2.4 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

DEFINED OUTPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc) / CURRENT (A)
3.0 Vdc ≤ Any Voltage ≤ 24.0 Vdc	3.0-4.0V/ 3.0-2.7A, 4.1-5.0V/ 2.6-2.4A, 5.1-6.0V/2.3-2.0A, 6.1-7.0V/ 1.9-1.7A, 7.1-8.0V/ 1.6-1.5A, 8.1-9.0V/ 1.4-1.3A, 9.1-10.0V/ 1.3-1.2A, 10.1-11.0V/ 1.1-1.0A, 11.1-12.0V/ 1.0A, 12.1-13.3V/ 0.9A, 13.4-15.0V/ 0.8A, 15.1-17.1V/ 0.7A, 17.2-20.0V/ 0.6A, 20.1-24.0V/0.5A, 24.0V/ 0.6A.

Note: Refer to the upper chart or specify the V/A ratings and consult factory for the exact Model No.

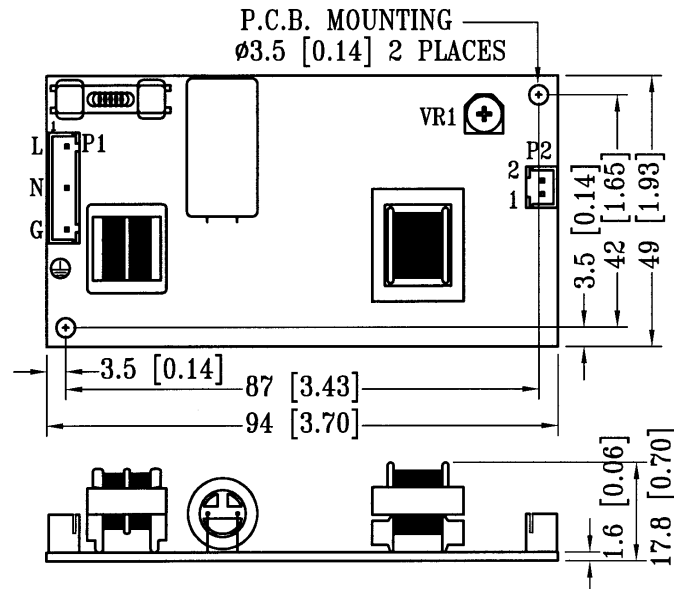
SINGLE OUTPUT (Model No. for example)

MODEL NO.	MAIN VO1 ★@	
	Volt.	Typ.
TPVI12-03030	3.0V	3.0A
TPVI12-03329	3.3V	2.9A
TPVI12-05024	5.0V	2.4A
TPVI12-09013	9.0V	1.3A
TPVI12-12010	12.0V	1.0A
TPVI12-15008	15.0V	0.8A
TPVI12-18006	18.0V	0.6A
TPVI12-24005	24.0V	0.5A
TPVI12-24006	24.0V	0.6A

Symbol: "★" OVP built-in. "@" Adjustable.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 54.0g (1.9 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT			SINGLE OUTPUT	
	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	DC COM
CONNECTOR & PIN #	P1-L	P1-N	P1-G	P2-2	P2-1

Mating connector: Molex 5051-N/ JST XHP-3.