# TOTAL POWER INT.

PCB-MOUNT UNIVERSAL INPUT AC-DC POWER SUPPLIES ENCAPSULATED MODULES 15-WATTS SINGLE OUTPUT TPAM15S SERIES



## **FEATURES:**

- ON-BOARD AC/DC MODULAR POWER SUPPLIES.
- WIDE INPUT VOLTAGE FOR THE WORLD WIDE USE.
- COMPACT IN SIZE.
- DESIGNED TO MEET UNIVERSAL SAFETY STANDARDS.
- **EMI MEET CISPR PUB.22 / FCC CLASS B.**
- **CE MARKING COMPLIANCE.**

# **SPECIFICATION**

### INPUT SPECIFICATION

Input Voltage: 90-264Vac.(Or 110-340Vdc). Input Frequency: 47-63 Hz. or DC.

Input Current: 0.32A @115Vac./0.15A @230Vac.

Inrush Current: 32.5A peak @230Vac.
Input Fuse: Use external fuse. 1.0A/250Vac. for

primary fuse is suggested **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: 20mS @115Vac, 120mS @230Vac.

Earth Leakage: Less than 3.5mA @230Vac.

#### **OUTPUT SPECIFICATION**

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: Typ.15Watts.
Output Indicator: LED
Line Regulation: ±0.1% typ.
Load Regulation: ±1.0% typ.

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

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

Adjustability: From -10% of main output till OVP Short Circuit Protection: Power fold back, self-recovering.

Overload Protection: About 130% of overrange

foldback type.

# GENERAL SPECIFICATION

Efficiency: Typ.72%

Switching Frequency: 83K Hz.

**Circuit Topology:** Fixed Frequency Flyback circuit. **Transient Response:** Output voltage returns in

less than 3mS following a 50% load change.

Case: Impact resistant thermo-plastic enclosure.

Weight: 120.0g (4.23 Oz).

Power Density: 3.76 Watts./ Cubic inch. Safety Standard: EN60950/ UL1950 Class I. **Operating Temperature:** -25 to +71°C range.

-10°C to +50°C without derating. Derating linearly 2.5%/°C from +50°C @F-L to +71°C @ H-L.

(Refer to Derating Chart.)

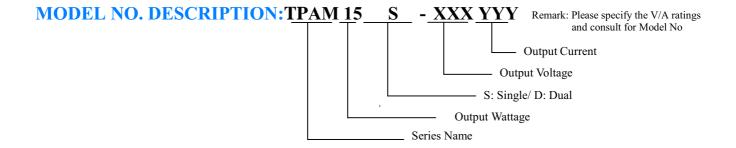
Storage Temperature: -40°C to +85°C. Temperature Coefficient: 0.02% /°C. Humidity: Up to 95%RH, Non-condensing.

**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.



# **OUTPUT VOLTAGE/ CURRENT RATINGS CHART**

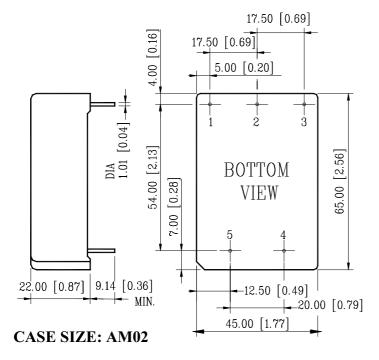
# **SINGLE OUTPUT**

MODEL NO.	VO1 @ ★		
	TYP.	VOLT.	PEAK
TPAM15S-180083	0.83A	18.0V	1.00A
TPAM15S-240062	0.62A	<b>24.0V</b>	0.74A
TPAM15S-360041	0.41A	36.0V	0.50A
TPAM15S-480031	0.31A	48.0V	0.37A

Symbols: "★" OVP build-in. "@" Adjustable.

Note: Peak output, less than 60 Sec. with duty cycle <10%.

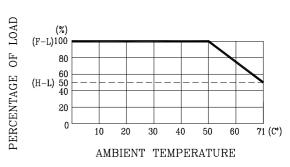
# **MECHANICAL DIMENSIONS: MM [INCHES]**



## PIN ASSIGNMENT

PIN NO.	SINGLE
PIN #1.	AC-GROUND
PIN #2.	AC-NEUTRAL
PIN #3.	AC-LINE
PIN #4.	+ VO1
PIN #5.	DC-COM

### **DERATING CHART**



Weight: 120.0g (4.23 Oz).