



**PCB-MOUNT UNIVERSAL INPUT AC-DC POWER SUPPLIES
ENCAPSULATED MODULES 15-WATTS SINGLE OUTPUT
HAM15S 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: $\pm 0.1\%$ typ.
Load Regulation: $\pm 1.0\%$ 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.

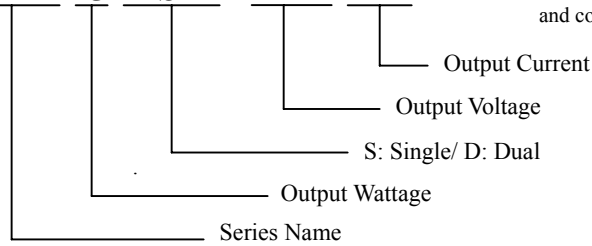
Cooling: Convection cooling for +50°C @ full load.
At least 100LFM moving air is recommended
for full load >+50°C in a confined area.

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.

MODEL NO. DESCRIPTION: HAM 15 S - XXX YYY

Remark: Please specify the V/A ratings and consult for Model No



OUTPUT VOLTAGE/ CURRENT RATINGS CHART

SINGLE OUTPUT

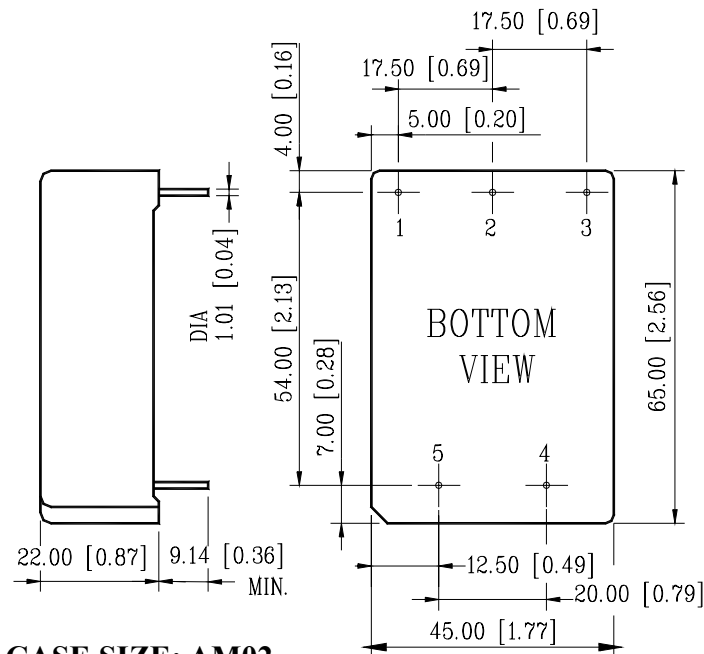
MODEL NO.	VO1 @ ★		
	TYP.	VOLT.	PEAK
HAM15S-180083	0.83A	18.0V	1.00A
HAM15S-240062	0.62A	24.0V	0.74A
HAM15S-360041	0.41A	36.0V	0.50A
HAM15S-480031	0.31A	48.0V	0.37A

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

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

MECHANICAL DIMENSIONS: MM [INCHES]

Weight: 120.0g (4.23 Oz).



CASE SIZE: AM02

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

