HiTRON

ON-BOARD UNIVERSAL INPUT AC-DC ENCAPSULATED MODULAR POWER SUPPLIES 10 WATTS TRIPLE OUTPUT HAM10-T SERIES

FEATURES:

- **ON-BOARD AC/DC MODULAR POWER SUPPLIES**
- **UNIVERSAL INPUT RANGE**
- **COMPACT IN SIZE**
- **MEET UNIVERSAL SAFETY STANDARDS**
- **EMI MEET CISPR PUB.22 / FCC CLASS B**
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: 90-264Vac.
Input Frequency: 47-63 Hz. (50/60 Hz. Nom.)
Input Current: 0.3A @115Vac./0.13A @230Vac typical.
Inrush Current: 32.5A typical peak @230Vac.
Input Fuse: Use external fuse. 1.0A/250Vac for the 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, 80mS @230Vac typical.
Earth Leakage: Less than 3.5mA @230Vac typical.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.
Output Current: See Ratings Chart.
Output Wattage: 10 Watts typical.
Output Indicator: LED.
Line Regulation: Various with output voltage, ±0.5% typ.
Load Regulation: Various with output voltage.
VO1 ±5.0% typ. VO2 ±3.0% typ. VO3 ±4.0% typ.
Noise & ripple: 1.0% typical peak to peak.
OVP: Built-in on main output.
Adjustability: From -10% of main output till OVP.
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: 70-75% typical. (Various with output voltage).
Switching Frequency: 83KHz.
Circuit Topology: Fixed Frequency Flyback circuit.
Transient Response: Typical peak deviation 250mV, Recovery time < 3mS for a 25% load change.
Case: Impact resistant thermo-plastic enclosure.
Power Density: 2.51 Watts. / Cubic inch.
Safety Standard: EN60950/ UL1950 Class I.
MTBF: 110,000 hours. Mil Std 217, 25 °C.

Operating Temperature: -10 to +70°C range.
-10°C to +50°C full load without derating.
From +50°C, derating linearly to half load @+70°C.
(Refer to Derating Chart.)
Storage Temperature: -20°C to +85°C.
Temperature Coefficient: ±0.03% /°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.

Due to requests in market and advances in technology, specifications subject to change without notice.

OUTPUT VOLTAGE/ CURRENT RATINGS CHART

TRIPLE OUTPUT

MODEL NO.	+VO1 @★			+VO2 †			-VO3 ‖		
	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.	TYP.	VOLT.	MAX.
HAM10T-5/09	1.0A	**+5.0V**	1.15A	0.27A	**+9.0V**	0.31A	0.27A	**-9.0V**	0.31A
HAM10T-5/12	1.0A	**+5.0V**	1.15A	0.25A	**+12.0V**	0.28A	0.25A	**-12.0V**	0.28A
HAM10T-5/15	1.0A	**+5.0V**	1.15A	0.20A	**+15.0V**	0.23A	0.20A	**-15.0V**	0.23A
HAM10T-5/24	1.0A	**+5.0V**	1.15A	0.12A	**+24.0V**	0.14A	0.12A	**-24.0V**	0.14A
HAM10T-3/05	1.0A	**+3.3V**	1.15A	0.40A	**+5.0V**	0.46A	0.40A	**-5.0V**	0.46A
HAM10T-3/12	1.0A	**+3.3V**	1.15A	0.25A	**+12.0V**	0.29A	0.25A	**-12.0V**	0.29A
HAM10T-3/15	1.0A	**+3.3V**	1.15A	0.20A	**+15.0V**	0.23A	0.20A	**-15.0V**	0.23A
HAM10T-3/5,12	1.0A	**+3.3V**	1.15A	0.40A	**+5.0V**	0.46A	0.25A	**-12.0V**	0.28A
HAM10T-3/24	1.0A	**+3.3V**	1.15A	0.12A	**+24.0V**	0.14A	0.12A	**-24.0V**	0.14A

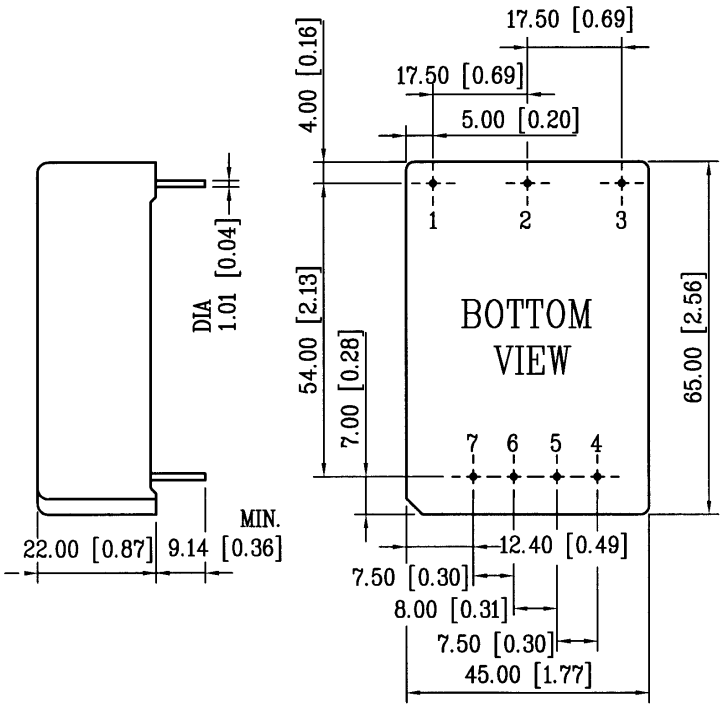
Symbols: "★" OVP built-in. "@" Adjustable. " ‖ " Double Feedback. "†" Stacked on main O/P.

Note: (1) Max. (maximum load) is the continuous operating load of each rail, but the max. load of each rail can not be drawn from all outputs at the same time.

(2) 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.	TRIPLE
PIN #1	AC-GROUND
PIN #2	AC-NEUTRAL
PIN #3	AC-LINE
PIN #4	+ VO2
PIN #5	+ VO1
PIN #6	DC-COM
PIN #7	- VO3

DERATING CHART