

AMEL05 Series



5 watt encapsulated ac-dc converter

- SWITCHING POWER MODULES FOR PCB MOUNTING
- LOW STANDBY POWER
- FULLY ENCAPSULATED PLASTIC CASE
- UNIVERSAL INPUT RANGE 90 ... 260VAC , 47 ... 440 HZ
- REGULATED OUTPUT
- LOW RIPPLE & NOISE
- HIGH EFFICIENCY
- CE MARKING

ELECTRICAL SPECIFICATIONS



All specifications valid at nominal Input voltage, full load and +25°C after warm-up time unless otherwise stated.

Model No. (Single Output)		AMEL05-3.3S	AMEL05-5S	AMEL05-12S	AMEL05-15S	AMEL05-24S
Max output wattage (W)		4W	5W	5W	5W	5.5W
Input	Voltage	90 ... 260 VAC or 120 ... 370 VDC				
	Frequency (Hz)	47 ... 440 Hz				
	Current (Full Load)	110mA max. (115 VAC) / 70mA max. (230 VAC)				
	Inrush Current (<2ms)	10 A max. (115 VAC) / 20 A max. (230VAC)				
	Leakage Current	0.75mA max.				
	External Fuse (recommended)	1.5 A slow blow type				
Output	Voltage (VDC)	3.3V	5V	12V	15V	24V
	Voltage Accuracy	±2%				
	Current (mA) max.	1250	1000	420	333	230
	Line Regulation	±0.3% max.				
	Load Regulation (5%-100%)	±0.5% max.				
	Minimum Load	0%				
	Maximum Capacitive Load	470-23,000m F depending on model				
	Ripple & Noise	<0.5% Vout +50mV max (Vp-p)				
	Efficiency	65%	73%	75%	77%	78%
	Hold-up Time	15 ms min.				
	Switching Frequency	125 kHz				
Protection	Over Current Protection	Hiccup technique, auto-recovery				
	Over Voltage Protection	Zener diode clamp				
	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)				
Isolation	Input-Output (VAC)	3000V				
Environment	Operating Temperature	-25°C ... +71°C				
	Storage Temperature	-40°C ... +85°C				
	Temperature Coefficient	0.02% / °C				
	Humidity	95% RH				
	MTBF	>340,000 h @ 25°C (MIL-HDBK-217F)				
Physical	Dimension (L x W x H)	2.0 x 1.0 x 0.597 inches (50.8 x 25.4 x 15.16 mm)				
	Case Material	Plastic resin + Fiberglass (flammability to UL 94V-0)				
	Weight	30g				
	Cooling Method	Free air convection				
Safety	Agency Approvals	CE				
EMC	EMI (Conducted & Radiated Emission)	EN 55022				
	EMS (Noise Immunity)	EN 55022				

Specifications are subject to change without notification

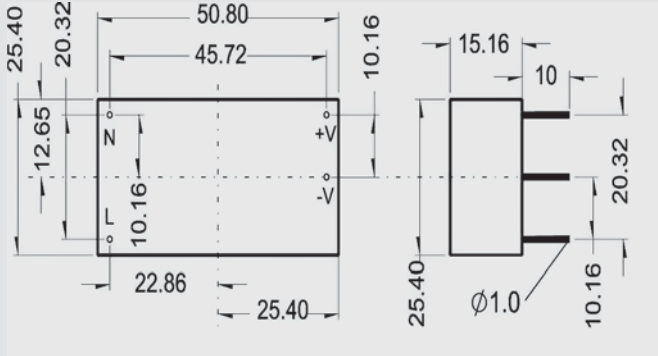
Continued on next page

VISIT US AT WWW.AIMTEC.CA

AMEL05 Series

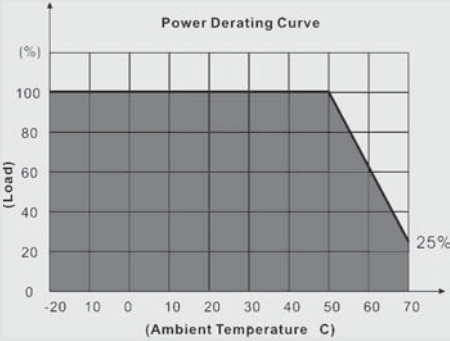
OUTLINE DIMENSIONS & PIN CONNECTIONS

MECHANICAL DIMENSION (Top View)



Pin	Single
N	AC Input
L	AC Input
+V	+DC Output
-V	-DC Output

DERATING



BLOCK DIAGRAM

