

**AOCH10 SERIES**
**10 Watts**
**KEY FEATURES**

- Ultra Compact Size: 1.46" x 1.08"
- Universal Input Range 90-305VAC, 47-440Hz
- I/O Isolation 4000VAC
- Operating Ambient Temperature Range -40°C to +70°C
- No Load Power Consumption < 0.1W
- High Efficiency up to 86%
- Operating attitude 5000m (UL / IEC / EN 62368-1)
- EMC Compliant without External Components
- Safety Approval to UL / IEC / EN 62368-1, IEC / EN 60950-1, TUV IEC / EN 60335-1, TUV IEC / EN 61558-2-16
- 3-Year Product Warranty


**ELECTRICAL SPECIFICATIONS**



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

Model No. ( Single Output )		AOCH10-5S	AOCH10-12S	AOCH10-15S	AOCH10-24S
Max Output Wattage (W)		10W			
Input	Voltage	90-305 VAC or 120-430 VDC ( N Connect +Vin ; L Connect -Vin ) for ITE 90-264 VAC or 120-370 VDC ( N Connect +Vin ; L Connect -Vin ) for Household			
	Frequency (Hz)	47-440 Hz			
	Current (Full load)	230 mA max. (115 VAC) / 140 mA max. (230 VAC)			
	Inrush Current	30 A max. (115 VAC) / 60 A max. (230 VAC)			
	Leakage Current	0.25 mA max.			
	External Fuse (mandatory)	2 A slow blow type			
Output	Voltage (V.DC.)	5V	12V	15V	24V
	Voltage Accuracy	±2%			
	Current (mA) max	2000	833	667	417
	Line Regulation (LL-HL) (typ.)	±0.2%			
	Load Regulation (0-100%) (typ.)	±1%		±0.5%	
	Maximum Capacitive Load	3,500uF	700uF	390uF	180uF
	Ripple & Noise (Vp-p) (max.)	<150mV		<160mV	1% Vout
	Efficiency (at 230VAC)	81%	85%	86%	86%
Hold-up Time (at 230VAC)	30 ms min.				
Protection	Over Power Protection	Hiccup technique, auto-recovery			
	Over Voltage Protection	Zener diode clamp			
	Short Circuit Protection	Hiccup mode, indefinite (automatic recovery)			
Isolation	Input-Output (V.AC)	4000V			
Environment	Operating Temperature	-40°C...+70°C ( with derating )			
	Storage Temperature	-40°C...+85°C			
	Temperature Coefficient	±0.02%/°C			
	Altitude During Operation (UL / IEC / EN 62368-1)	5000m			
	Humidity	95% RH			
	MTBF	>450,000 h @ 25°C (MIL-HDBK-217F)			
	Vibration	IEC60068-2-6 (10~500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes)			
	Shock	IEC60068-2-27			
Physical	Dimensions (L x W x H)	1.46 x 1.08 x 0.79 Inches ( 37.0 x 27.5 x 20.0 mm ) Tolerance ±0.5 mm			
	Case Material	Plastic resin (flammability to UL 94V-0)			
	Weight	31 g			
	Cooling Method	Free air convection			
Safety	Agency Approvals	UL / IEC / EN 62368-1, IEC / EN 60950-1, TUV IEC / EN 60335-1, TUV IEC / EN 61558-2-16			
EMC	EMI (Conducted & Radiated Emission)	EN 55032 class B			
	EMS (Noise Immunity)	EN 55035			

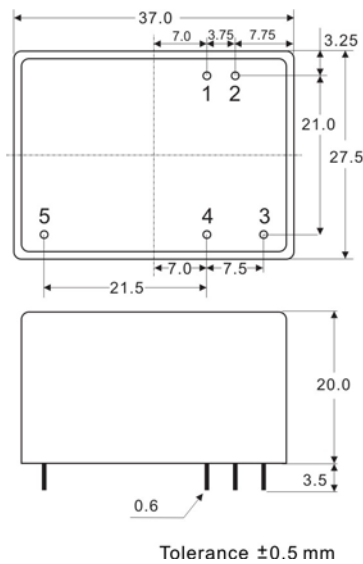
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**10 Watts**

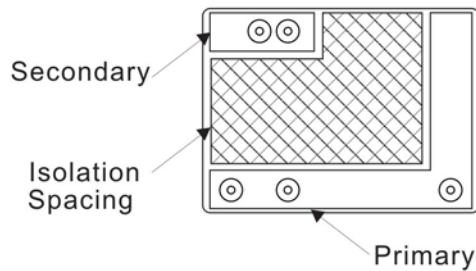
**NOTE**

1. Ripple & Noise are measured at 20MHz of bandwidth with 0.1uF & 47uF parallel capacitor.
2.  **SMPS** incorporating a short-circuit-proof safety isolating transformer (non-inherently)
3.  **SMPS** (Switching mode power supply unit)
4. A fuse 300V/2A is directly connected to the input and this fuse is 3.2mm min. away from each polarity.

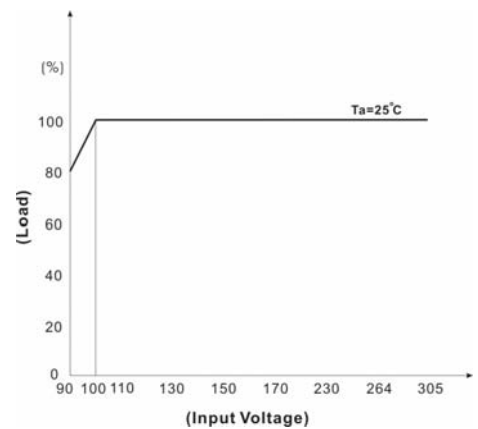
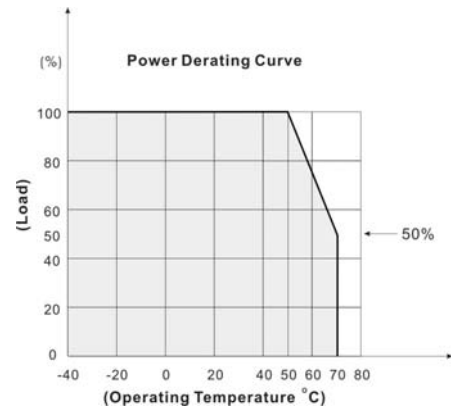
**MECHANICAL DIMENSIONS ( Top View )**



**Isolation Bottom View**



**DERATING**



PIN#	Single
1	+Vo
2	GND
3	AC IN (L)
4	AC IN (N)
5	NC CONNECT

**BLOCK DIAGRAM**

Single Output

