

KEY FEATURES

- Switching Power Module for PCB Mountable
- Fully Encapsulated Plastic Case
- Universal Input Range 90-264VAC, 47-440 Hz
- Single and Dual Output
- Low Ripple and Noise
- High Efficiency
- Maximum No-Load Watts < 0.3W
- CE , UL Approval
- 2-Years Product Warranty


ELECTRICAL SPECIFICATIONS

Model No. (Single Output)	AOC-3.3S	AOC-5S	AOC-8S	AOC-9S	AOC-12S	AOC-14S	AOC-15S	AOC-24S	
Max Output Wattage (W)	2.97W	3W	3W	3W	3W	3W	3W	3W	
Input	Voltage								
	90-264 VAC or 120-370 VDC								
	Frequency (Hz)								
	47-440 Hz								
	Current (Full load)								
	75 mA max. (115 VAC) / 55 mA max. (230 VAC)								
Inrush Current (<500us)									
15 A max. (115 VAC) / 25 A max. (230 VAC)									
Leakage Current									
0.3 mA max.									
External Fuse (recommend)									
1 A slow blow type									
Output	Voltage (V.DC.)								
	3.3V	5V	8V	9V	12V	14V	15V	24V	
	Voltage Accuracy								
	±2%								
	Current (mA) max								
	900	600	375	333	250	215	200	125	
	Line Regulation (LL-HL) (typ.)								
	±0.2%								
	Load Regulation (0-100%) (typ.)								
	±0.5%								
	Minimum Load								
0%									
Maximum Capacitive Load									
15000uF	8000uF	2000uF	2000uF	1000uF	820uF	820uF	220uF		
Ripple									
3.3S~15S : <100mV max (Vp-p) 24S : <150mV max (Vp-p)									
Noise									
3.3S~15S : <150mV max (Vp-p) 24S : <200mV max (Vp-p)									
Efficiency									
72%	74%	76%	76%	78%	78%	78%	78%		
Hold-up Time									
15 ms min.									
Switching Frequency									
132±8 KHz									
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)								
3000V									
Environment	Operating Temperature								
	-40°C...+70°C (with derating)								
	Storage Temperature								
	-40°C...+125°C								
	Temperature Coefficient								
±0.02%/°C									
Humidity									
95% RH									
MTBF									
>350,000 h @ 25°C (MIL-HDBK-217F)									
Physical	Dimension (L x W x H)								
	1.44 x 1.07 x 0.67 Inches (36.66 x 27.16 x 17.1 mm) Tolerance ±0.5 mm								
	Case Material								
	Plastic resin with Fiberglass (flammability to UL 94V-0)								
Weight									
26 g									
Cooling Method									
Free air convection									
Safety	Agency Approvals								
UL , cUL , CE (Pending)									
EMC	EMI (Conducted & Radiated Emission)								
	EN 55022 class B (Pending)								
EMS (Noise Immunity)									
EN 55024 (Pending)									

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

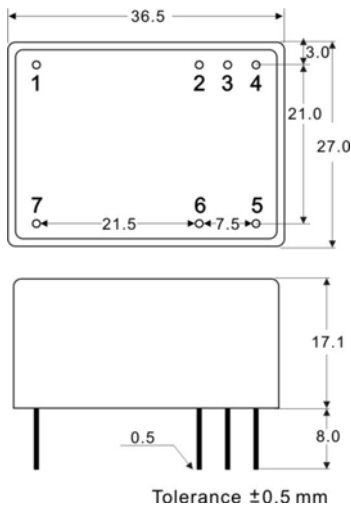
ELECTRICAL SPECIFICATIONS

Model No. (Dual Output)	AOC-5S3.3S	AOC-8S5S	AOC-12S5S
Max Output Wattage (W)	3.5W	3.6W	3.6W
Input	Voltage		
	90-264 VAC or 120-370 VDC		
	Frequency (Hz)		
	47-440 Hz		
	Current (Full load)		
	85 mA max. (115 VAC) / 65 mA max. (230 VAC)		
Inrush Current (<500us)			
15 A max. (115 VAC) / 25 A max. (230 VAC)			
Leakage Current			
0.3 mA max.			
External Fuse (recommend)			
1 A slow blow type			
Output	Voltage (V.DC.)		Vo : 5V Vr : 3.3V
	Voltage Accuracy		Vo : ±2% Vr : ±5%
	Current (mA) max		600 / 150
	Line Regulation (LL-HL) (typ.)		Vo : ±0.2% Vr : ±3%
	Load Regulation (0-100%) (typ.)		Vo : ±0.5% Vr : ±5%
	Minimum Load		0%
	Maximum Capacitive Load		Vo : 5600uF Vr : 4700uF
	Ripple		<100mV max (Vp-p)
	Noise		<150mV max (Vp-p)
	Efficiency		73%
	Hold-up Time		15 ms min.
	Switching Frequency		132±8 KHz
	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)		
3000V			
Environment	Operating Temperature		
	-40°C...+70°C (with derating)		
	Storage Temperature		
	-40°C...+125°C		
	Temperature Coefficient		
±0.02%/°C			
Humidity			
95% RH			
MTBF			
>350,000 h @ 25°C (MIL-HDBK-217F)			
Physical	Dimension (L x W x H)		
	1.44 x 1.07 x 0.67 Inches (36.66 x 27.16 x 17.1 mm) Tolerance ±0.5 mm		
	Case Material		
	Plastic resin with Fiberglass (flammability to UL 94V-0)		
Weight			
26 g			
Cooling Method			
Free air convection			
Safety	Agency Approvals		
UL , cUL , CE (Pending)			
EMC	EMI (Conducted & Radiated Emission)		
	EN 55022 class B (Pending)		
EMS (Noise Immunity)			
EN 55024 (Pending)			

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

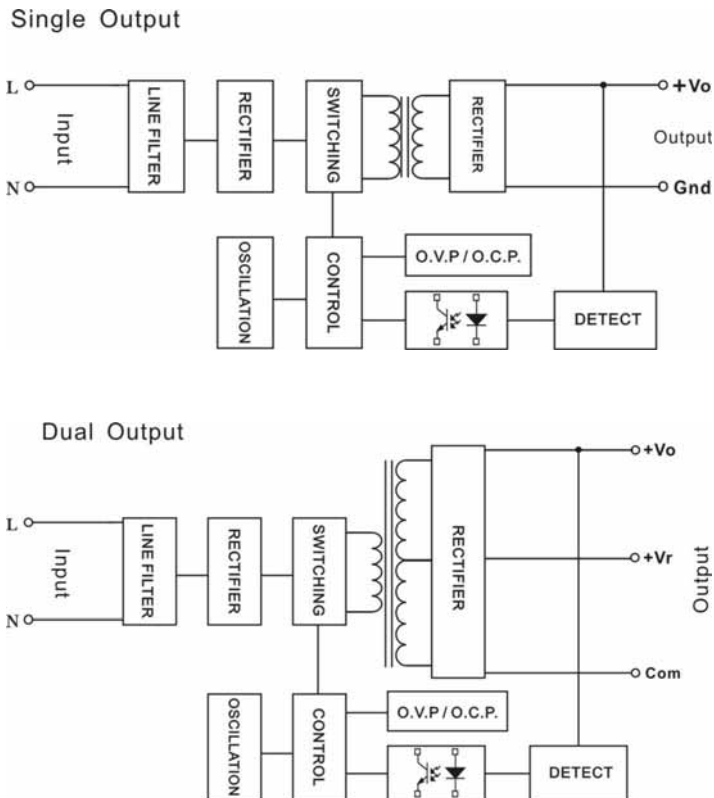
Vo : Measured with 47µF 25V Ceramic Cap. Cross to output.

MECHANICAL DIMENSION (Top View)



PIN#	SINGLE	Dual
1	NC	NC
2	+Vo	+Vo
3	GND	COM
4	NC	+Vr
5	AC IN (L)	AC IN (L)
6	AC IN (N)	AC IN (N)
7	NC	NC

BLOCK DIAGRAM



DERATING

