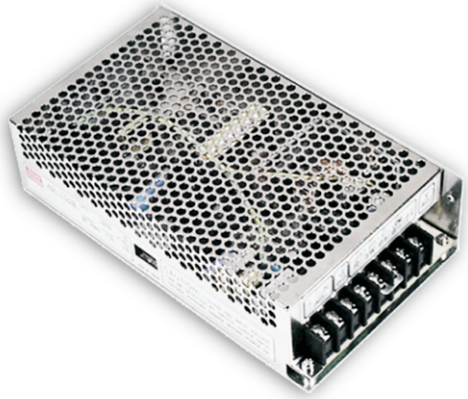
155W Single Output with 5V, 3A DC-DC Converter

ADS-155 series



Features :

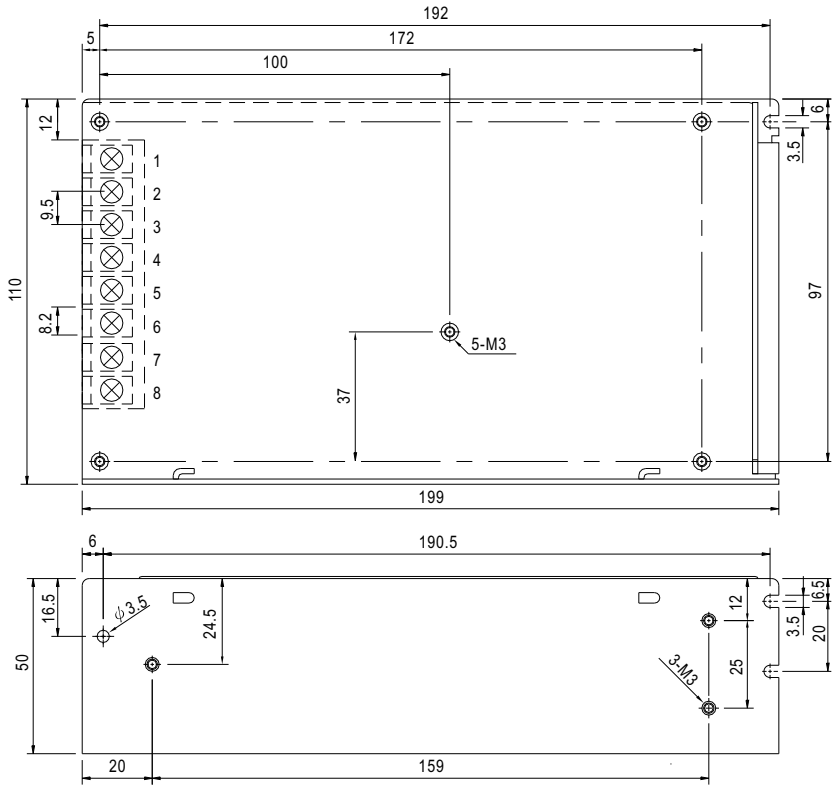
- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at PFC 67KHz, PWM 134KHz
- 2 years warranty

SPECIFICATION

MODEL		ADS-15512		ADS-15524		ADS-15548	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	12V	5V	24V	5V	48V	5V
	RATED CURRENT	11.5A	3A	5.8A	3A	2.9A	3A
	CURRENT RANGE	0 ~ 12.5A	0 ~ 3A	0 ~ 6.5A	0 ~ 3A	0 ~ 3.2A	0 ~ 3A
	RATED POWER	153W		154.2W		154.2W	
	RIPPLE & NOISE (max.) Note.2	150mVp-p	100mVp-p	150mVp-p	100mVp-p	240mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	CH1:10.8 ~ 13.2V		CH1:21.6 ~ 26.4V		CH1:43.2 ~ 52.8V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±3.0%	±1.0%	±3.0%	±1.0%	±5.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±2.0%	±0.5%	±2.0%	±1.0%	±1.0%
	SETUP, RISE TIME	1000ms, 90ms/230VAC 2000ms, 90ms/115VAC at full load					
	HOLD UP TIME (Typ.)	24ms/230VAC 20ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 ~ 264VAC 124 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	PF>0.92					
	EFFICIENCY (Typ.)	77%		82%		82%	
	AC CURRENT (Typ.)	2.5A/115VAC 1.5A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC 40A/230VAC					
	LEAKAGE CURRENT	<1mA / 240VAC					
PROTECTION	OVERLOAD	105 ~ 135% rated output power					
		Protection type : Constant current limiting, recovers automatically after fault condition is reoved					
	OVER VOLTAGE	CH1:13.8 ~ 16.2V		CH1:27.6 ~ 32.4V		CH1:55.2 ~ 64.8V	
		Protection type : Shut down o/p voltage, re-power on to recover					
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B					
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A					
OTHERS	MTBF	202.3K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	199*110*50mm (L*W*H)					
	PACKING	1Kg; 16pcs/16Kg/0.95CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.						

■ Mechanical Specification

Case No. 906B Unit:mm

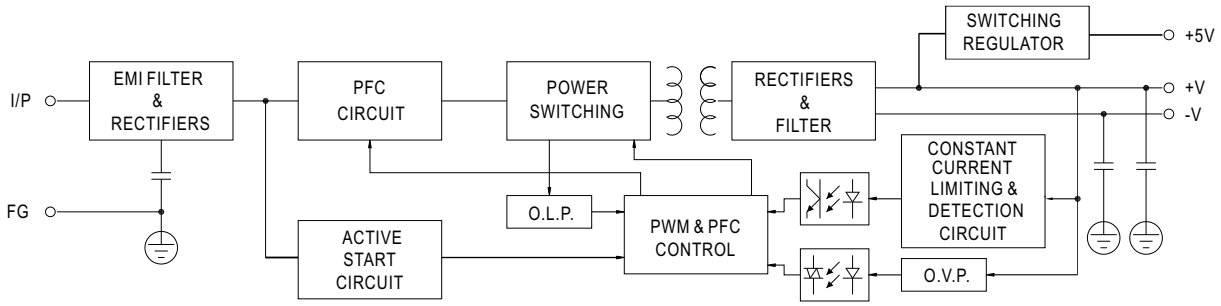


Terminal Pin No. Assignment

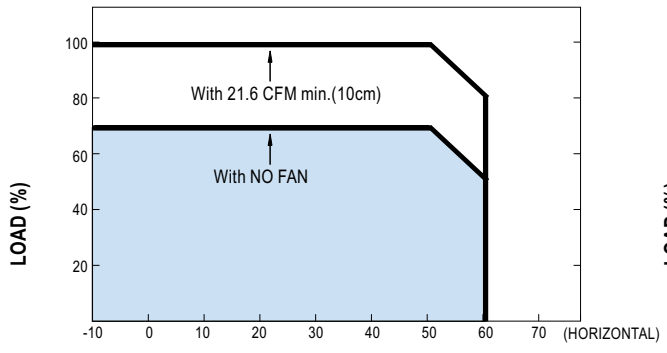
Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	NC
2	AC/N	6,7	DC OUTPUT COM
3	FG ⏚	8	DC OUTPUT +V
4	+5V		

PFC fosc : 67KHz
PWM fosc : 134KHz

■ Block Diagram

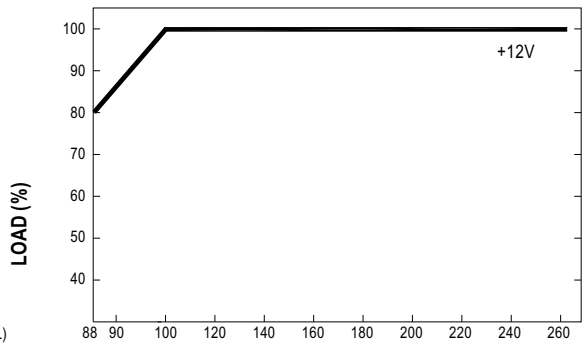


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Output Derating VS Input Voltage (15512)



INPUT VOLTAGE (V) 60Hz