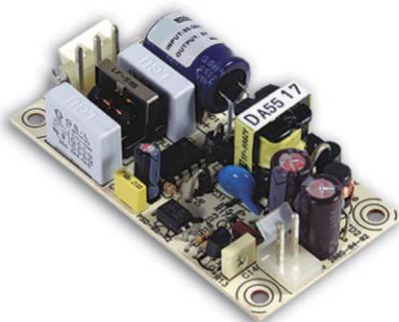




E-Star Power Development Co., Ltd. (E-STAR)
1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City
22069, Taiwan (R.O.C.)
Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

5W Open Frame type Single output power supply > PS-05



■ Features :

- Universal AC input / Full range
- Low leakage current <0.5mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- 100% full load burn-in test
- Fix switching frequency at 67KHz
- Low cost
- High reliability
- 2 years warranty



SPECIFICATION

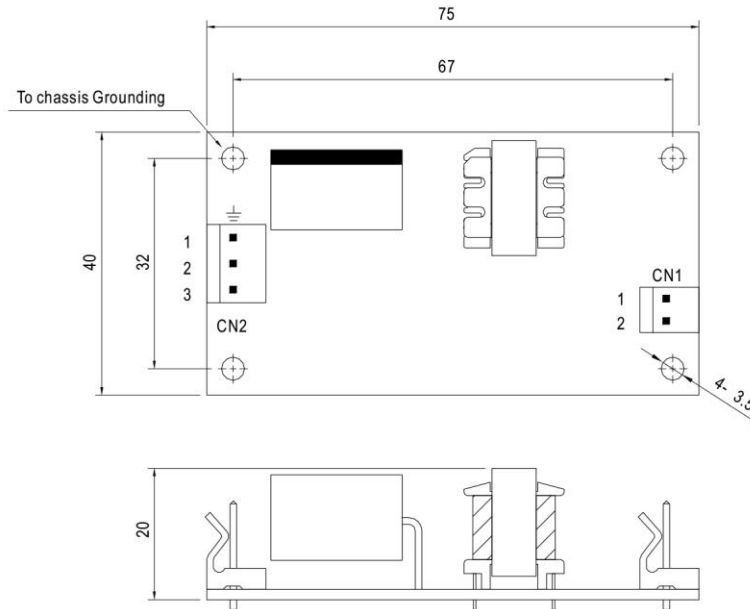
MODEL		PS-05-5	PS-05-12	PS-05-15	PS-05-24	PS-05-48
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	48V
	RATED CURRENT	1A	0.45A	0.35A	0.22A	0.11A
	CURRENT RANGE	0 ~ 1.2A	0 ~ 0.5A	0 ~ 0.4A	0 ~ 0.25A	0 ~ 0.125A
	RATED POWER	5W	5.4W	5.25W	5.28W	5.28W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 1.0%
	LINE REGULATION	± 1.0%	± 1.0%	± 1.0%	± 0.5%	± 0.5%
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 0.5%	± 0.5%
	SETUP, RISE TIME	1000ms, 20ms				
HOLD UP TIME(Typ.)	100ms at full load					
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz				
	EFFICIENCY(Typ.)	70%	75%	75%	76%	76%
	AC CURRENT (Typ.)	0.15A/115VAC 0.07A/230VAC				
	INRUSH CURRENT (Typ.)	COLD START 30A/230VAC				
	LEAKAGE CURRENT	<0.5mA / 240VAC				
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Hiccup mode, recovery automatically after fault condition is removed				
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	17.2 ~ 20.2V	27.6 ~ 32.4V	55.2 ~ 64.8V
	OVER TEMPERATURE	Hiccup mode, recovery automatically after fault condition is removed				
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to "Derating Curve")				
	WORKING HUMIDITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH				
	TEMP. COEFFICIENT	± 0.05%/°C (0 ~ 50°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note 4)	SAFETY STANDARDS	EAC TP TC 004 approved, IEC62368-1 CB approved by TUV				
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC				
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH				
	EMI CONDUCTION & RADIATION	Compliance to EN55032 (CISPR32) Class B, EAC TP TC 020				
	HARMONIC CURRENT	Compliance to EN61000-3-2,-3				
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A, EAC TP TC 020				
	DIMENSION	75*40*20mm (L*W*H)				
	PACKING	0.05Kg; 120pcs/6.25Kg/0.56CUFT				
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." 5. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).					



5W Open Frame type Single output power supply > PS-05

Mechanical Specification

Unit:mm



AC Input Connector (CN2) : Molex 5285-03 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG \perp	Molex 5058 or equivalent	Molex 2478 or equivalent
2	AC/N		
3	AC/L		

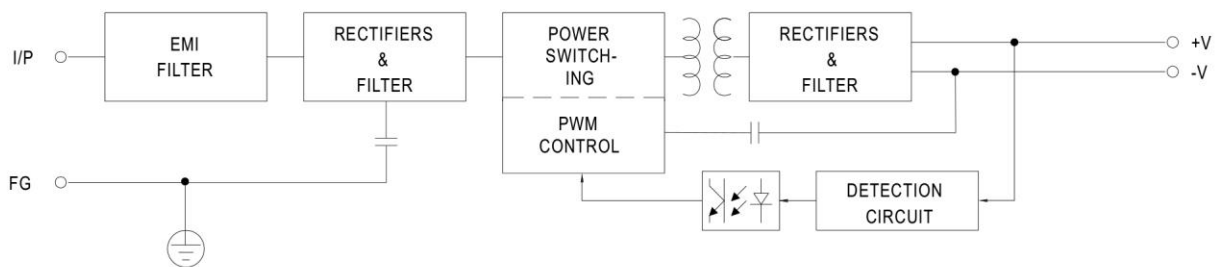
DC Output Connector (CN1) : Molex 5273-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
2	-V		

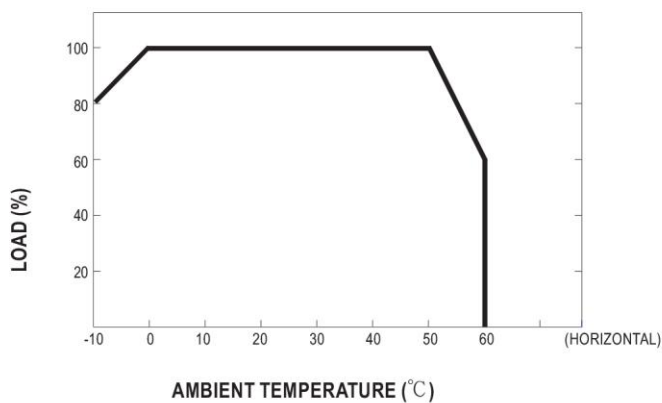
\perp : Grounding Required
CN2:Pin 1 is safety ground

Block Diagram

fosc : 67KHz



Derating Curve



Static Characteristics

