



# 25W Dual Output Switching Power Supply

# PD-25 series



### ■ 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
- Fixed switching frequency at 100KHz
- Low cost
- High reliability
- 2 years warranty



User's Manual

### ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



(for PD-25A only)



UL62368-1



BS EN/EN62368-1



IEC62368-1



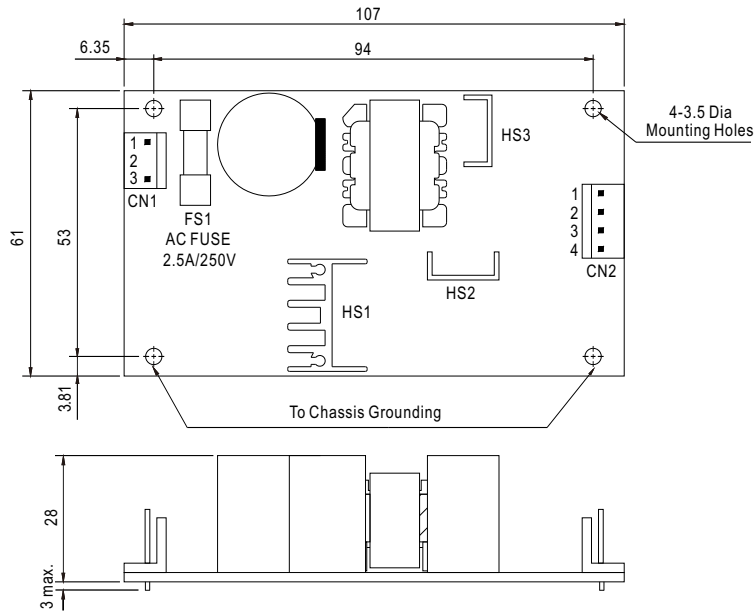
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### SPECIFICATION

MODEL	PD-25A		PD-25B		PD-2505		PD-2512		PD-2515		
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V	5V	-5V	12V	-12V	15V	-15V
	RATED CURRENT	2.1A	1.2A	1.2A	0.8A	2.5A	2.5A	1A	1A	0.8A	0.8A
	CURRENT RANGE	0.2 ~ 2.5A	0.1 ~ 1.5A	0.2 ~ 2A	0.1 ~ 1A	0.1 ~ 3A	0.1 ~ 2.5A	0.1 ~ 1.2A	0.1 ~ 1.2A	0.1 ~ 1A	0.1 ~ 1A
	RATED POWER	24.9W		25.2W		25W		24W		24W	
	RIPPLE & NOISE (max.) Note.2	50mVp-p	150mVp-p	50mVp-p	200mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p	50mVp-p
	VOLTAGE TOLERANCE Note.3	±2.0%	±6.0%	±2.0%	±6.0%	±6.0%	±6.0%	±4.0%	±4.0%	±4.0%	±4.0%
	LINE REGULATION	±0.5%	±2.0%	±0.5%	±2.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±4.0%	±1.0%	±4.0%	±4.0%	±4.0%	±3.0%	±3.0%	±3.0%	±3.0%
	SETUP, RISE TIME	250ms, 50ms/230VAC		250ms, 30ms/115VAC		at full load					
HOLD UP TIME (Typ.)	100ms/230VAC		16ms/115VAC		at full load						
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY(Typ.)	71%		77%		73%		74%		75%	
	AC CURRENT (Typ.)	0.65A/115VAC		0.4A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 32A									
	LEAKAGE CURRENT	<0.5mA / 240VAC									
PROTECTION	OVERLOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.2V	5.75 ~ 6.75V	27.6 ~ 32.4V	5.75 ~ 6.75V	-5.75 ~ -6.75V	13.8 ~ 16.2V	-13.8 ~ -16.2V	17.3 ~ 20.3V	-17.3 ~ -20.3V
		Protection type : Shut off o/p voltage, clamping by zener diode									
OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover										
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	±0.03%/°C (0 ~ 50°C) ON CH1 output									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004, CCC GB4943.1(for PD-25A only) approved									
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC		I/P-FG:2KVAC		O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020, GB9254 Class B, GB17625.1									
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5, BS EN/EN55035, light industry level, EAC TP TC 020									
OTHERS	MTBF	5363.3K hrs min.		Telcordia SR-332 (Bellcore) ; 707.6K hrs min.		MIL-HDBK-217F (25°C)					
	DIMENSION	107*61*28mm (L*W*H)									
	PACKING	0.15Kg; 96pcs/15.9Kg/1.2CUFT									
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>5. Heat Sink HS1,HS2,HS3 can not be shorted.</li> <li>6. 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).</li> </ol> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>										

**Mechanical Specification**

Unit:mm



AC Input Connector (CN1) : Molex 41791-03 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 2139 or equivalent	Molex 2478 or equivalent
2	No Pin		
3	AC/N		

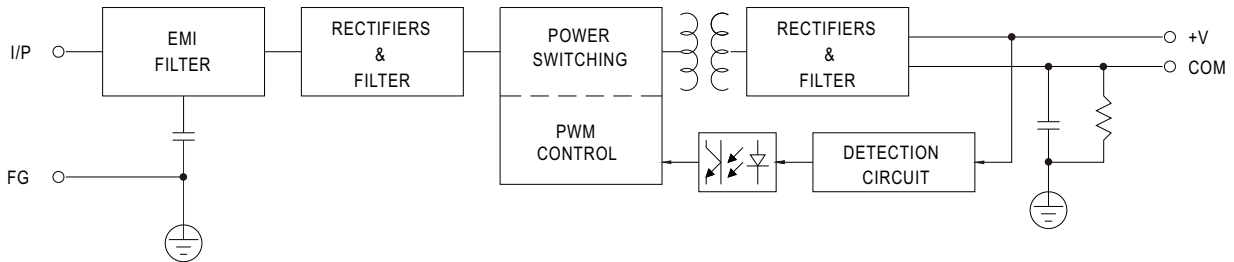
DC Output Connector (CN2) : Molex 41791-04 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	V1	Molex 2139 or equivalent	Molex 2478 or equivalent
2,3	COM		
4	V2		

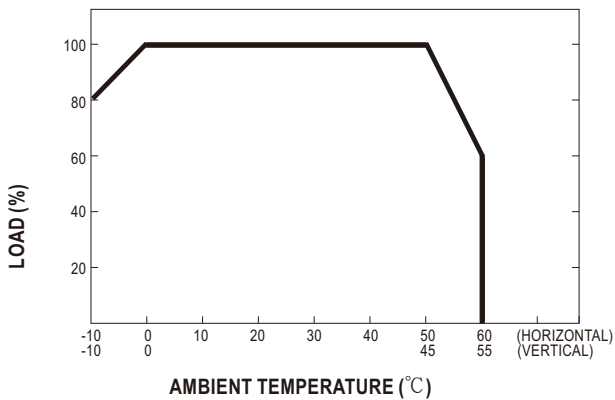
⚠ HS1,HS2,HS3 can not be shorted

**Block Diagram**

fosc : 100KHz



**Derating Curve**



**Static Characteristics (A)**

