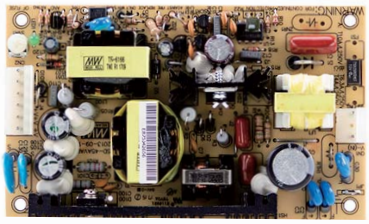
45W DC-DC Single Output Switching Power Supply

PSD-45 series





■ Features :

- 2:1 wide input range
- Protections:Short circuit/Over load /Over voltage/ Polarity
- Cooling by free air convection
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at **96**KHZ
- Low cost
- High reliability
- **2** year warranty

User's Manual

■ GTIN CODE

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

BS EN/EN62368-1 TPTC004 IEC62368-1

SPECIFICATION

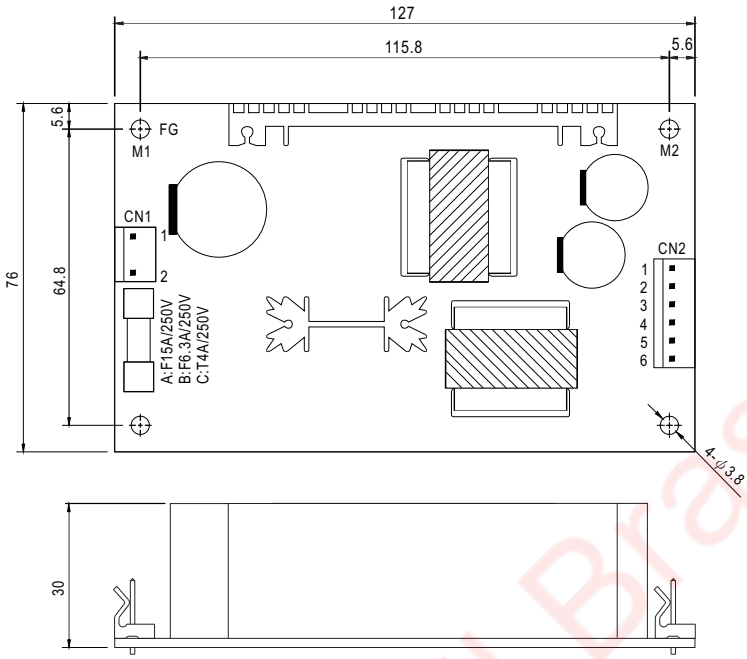
MODEL		PSD-45A-05	PSD-45B-05	PSD-45C-05	PSD-45A-12	PSD-45B-12	PSD-45C-12	PSD-45A-24	PSD-45B-24	PSD-45C-24
OUTPUT	DC VOLTAGE	5V	5V	5V	12V	12V	12V	24V	24V	24V
	RATED CURRENT	6A	9A	9A	2.5A	3.75A	3.75A	1.25A	1.875A	1.875A
	CURRENT RANGE	0 ~ 6A	0 ~ 9A	0 ~ 9A	0 ~ 2.5A	0 ~ 3.75A	0 ~ 3.75A	0 ~ 1.25A	0 ~ 1.875A	0 ~ 1.875A
	RATED POWER	30W	45W	45W	30W	45W	45W	30W	45W	45W
	RIPPLE & NOISE (max.) Note.2	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ RANGE	4.5 ~ 5.5V			10.8 ~13.2V			21.6 ~ 26.4V		
	VOLTAGE TOLERANCE Note.3	±2.0%			±2.0%			±2.0%		
	LINE REGULATION	±1.0%			±1.0%			±0.5%		
	LOAD REGULATION	±1.0%			±1.0%			±0.5%		
	SETUP, RISE, HOLD UP TIME	1000ms, 50ms, ----/12VDC/24VDC at full load; 1500ms,50ms,----48VDC at full load								
INPUT	VOLTAGE RANGE	A: 9.2 ~18VDC (12VDC) B:18 ~ 36VDC (24VDC) C:36~72VDC(48VDC)								
	EFFICIENCY(Typ.)	74%	77%	80%	78%	82%	83%	79%	85%	86%
	DC CURRENT(Typ.)	3.5A/12VDC 2.5A/24VDC 1.2A/48VDC								
PROTECTION	OVER LOAD	105% -160% rated output power								
		Protection type :shut down, Re-power on after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V/10%load			13.8~ 16.2V/10%load			27.6 ~ 32.4V/10%load		
		Protection type : Hiccup mode, recovery automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve),20~90%RH non-condensing								
	WORKING HUMIDITY	20 ~ 95% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.05%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, Period for 60min.each along X, Y, Z axes								
SAFETY & EMC	SAFETY STANDARDS	TUV BS EN/EN62368-1, EAC TP TC 004 approved								
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:2.0KVAC 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 BS EN/EN55032(CISPR32) CLASS B, EAC TP TC 020								
	EMS IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8,BS EN/EN55035,BS EN/EN61000-6-1 Light industry level, EAC TP TC 020								
OTHERS	MTBF	3067.4K hrs min. Telcordia SR-332 (Bellcore) ; 463.9K hrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	127*76*30mm (L*W*H)								
	PACKING	0.19Kg;72pcs/15.6Kg/1.28CUFT								
NOTE	1.All parameters NOT specially mentioned are measured at normal input,rated load and 25℃ of ambient temperature. 2.Ripple & noise are measued at 20 MHz of bandwidth by using a 12inch twisted pair-wire termined with a 0.1uf & 47uf capacitor. 3.Tolerance:includes set up tolerance,line regulation and load regulation. 4.The interval of turning ON and OFF the power supply continuously is 2 seconds. 5.The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx									

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■ Mechanical Specification

Unit:mm



DC Input Connector (CN1) : Molex 5277-02 or equivalent

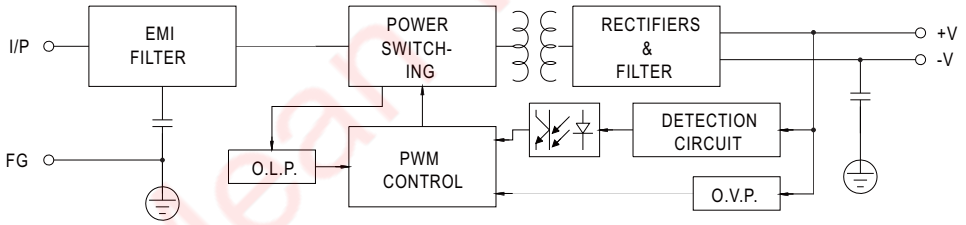
Pin No.	Assignment	Mating Housing	Terminal
1	Vin-	Molex 5195 or equivalent	Molex 5194 or equivalent
2	Vin+		

DC Output Connector (CN2) : Molex 5273-06 or equivalent

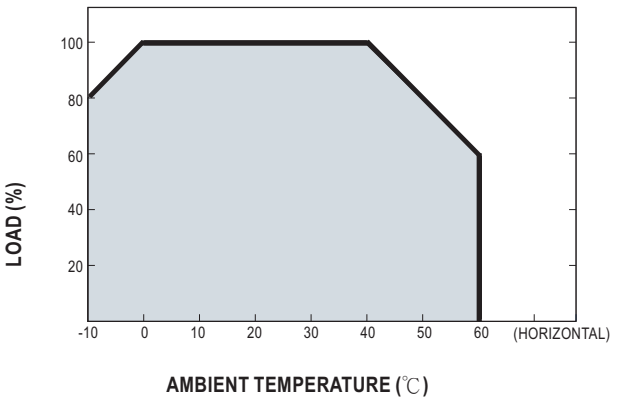
Pin No.	Assignment	Mating Housing	Terminal
1,2,3	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
4,5,6	-V		

■ Block Diagram

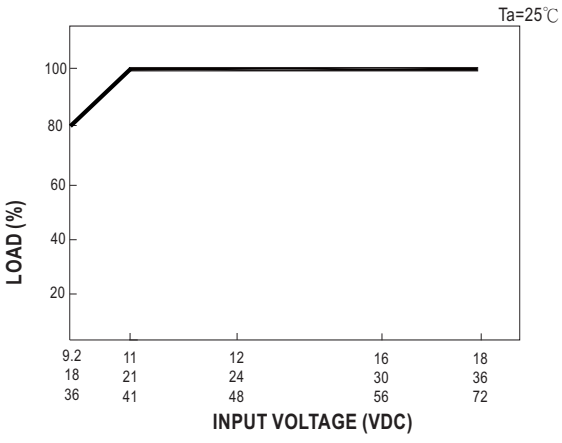
fosc :96KHz



■ Output Derating



■ Static Characteristics



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