



## SPECIFICATION

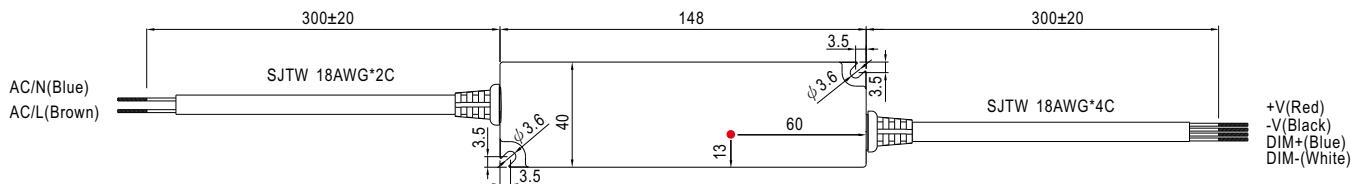


MODEL	LPF-25D-12	LPF-25D-15	LPF-25D-20	LPF-25D-24	LPF-25D-30	LPF-25D-36	LPF-25D-42	LPF-25D-48	LPF-25D-54						
OUTPUT	<b>DC VOLTAGE</b>	12V	15V	20V	24V	30V	36V	42V	48V						
	CONSTANT CURRENT REGION Note.4	6.6 ~ 12V	8.25 ~ 15V	11 ~ 20V	13.2 ~ 24V	16.5 ~ 30V	19.8 ~ 36V	23.1 ~ 42V	26.4 ~ 48V						
	<b>RATED CURRENT</b>	2.1A	1.67A	1.25A	1.05A	0.84A	0.7A	0.6A	0.53A						
	<b>RATED POWER</b>	25.2W	25.05W	25W	25.2W	25.2W	25.2W	25.44W	25.38W						
	<b>RIPPLE &amp; NOISE (max.) Note.2</b>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	200mVp-p	250mVp-p	250mVp-p	350mVp-p						
	<b>VOLTAGE TOLERANCE Note.3</b>	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%	±4.0%						
	<b>LINE REGULATION</b>	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%						
	<b>LOAD REGULATION</b>	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%						
	<b>SETUP, RISE TIME Note.7</b>	1500ms, 80ms / 115VAC at full load		500ms, 80ms / 230VAC											
INPUT	<b>HOLD UP TIME (Typ.)</b>	16ms at full load		230VAC / 115VAC											
	<b>VOLTAGE RANGE Note.5</b>	90 ~ 305VAC		127 ~ 431VDC											
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz													
	<b>POWER FACTOR (Typ.)</b>	PF>0.97/115VAC, PF>0.95/230VAC, PF>0.92/277VAC at full load (Please refer to "Power Factor Characteristic" curve)													
	<b>EFFICIENCY (Typ.)</b>	84%	84%	85%	85.5%	85.5%	85.5%	85.5%	86%						
	<b>AC CURRENT</b>	0.4A / 115VAC	0.25A / 230VAC	0.2A/277VAC											
PROTECTION	<b>INRUSH CURRENT (Typ.)</b>	COLD START 50A(width=200μs measured at 50% Ipeak) at 230VAC													
	<b>LEAKAGE CURRENT</b>	<0.75mA / 240VAC													
	<b>OVER CURRENT Note.4</b>	95 ~ 108%													
	Protection type : Constant current limiting, recovers automatically after fault condition is removed														
ENVIRONMENT	<b>SHORT CIRCUIT</b>	Hiccup mode, recovers automatically after fault condition is removed.													
	<b>OVER VOLTAGE</b>	15 ~ 18V	17.5 ~ 21V	23 ~ 27V	28 ~ 35V	34 ~ 40V	41 ~ 49V	46 ~ 54V	54 ~ 63V						
	Protection type : Shut down and latch off o/p voltage, re-power on to recover														
	<b>OVER TEMPERATURE</b>	Shut down o/p voltage, recovers automatically after temperature goes down													
SAFETY & EMC	<b>WORKING TEMP.</b>	-35 ~ +70°C (Refer to "Derating Curve")													
	<b>WORKING HUMIDITY</b>	20 ~ 95% RH non-condensing													
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +80°C, 10 ~ 95% RH													
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)													
OTHERS	<b>VIBRATION</b>	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes													
	<b>SAFETY STANDARDS Note.6</b>	UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, EN62384, J61347-1, J61347-2-13 approved, IP67 approved; Design refer to UL60950-1, TUV EN60950-1													
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3.75KVAC													
NOTE	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH													
	<b>EMC EMISSION</b>	Compliance to EN55015; EN61000-3-2 Class C (≥ 55% load); EN61000-3-3													
	<b>EMC IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge 2KV), criteria A													
OTHERS	<b>MTBF</b>	418.5Khrs min. MIL-HDBK-217F (25°C)													
	<b>DIMENSION</b>	148*40*32mm (L*W*H)													
	<b>PACKING</b>	0.36Kg; 40pcs / 15.4Kg / 1.02CUFT													

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. Constant current operation region is within 55% ~ 100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.
5. Derating may be needed under low input voltages. Please check the static characteristics for more details.
6. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minutes.
7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
8. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
9. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.
10. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.

## ■ Mechanical Specification

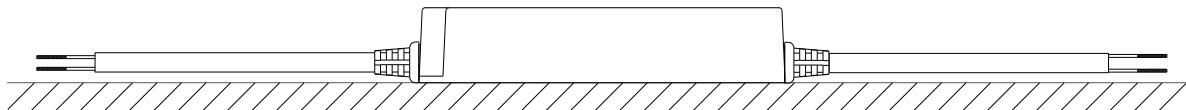
Case No.: LPF-16A Unit:mm



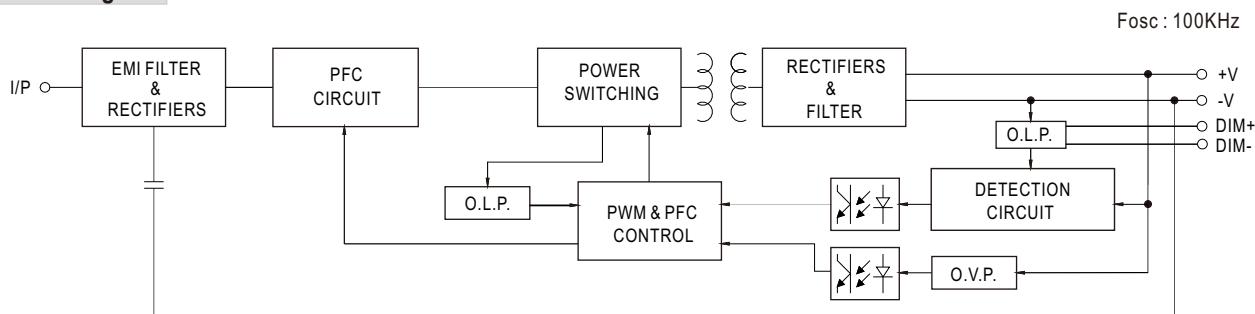
※ T case: Max. Case Temperature.



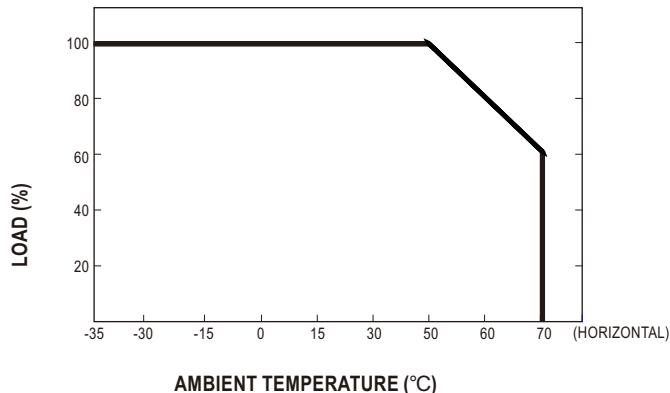
## ■ Recommend Mounting Direction



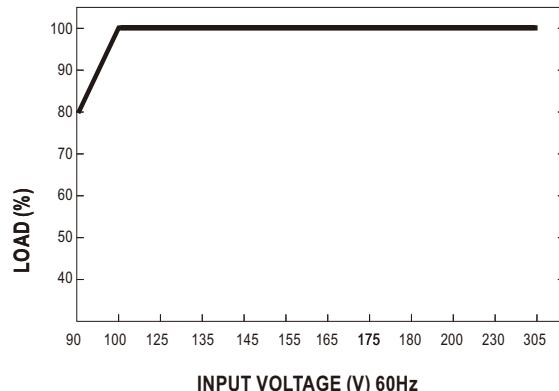
## ■ Block Diagram

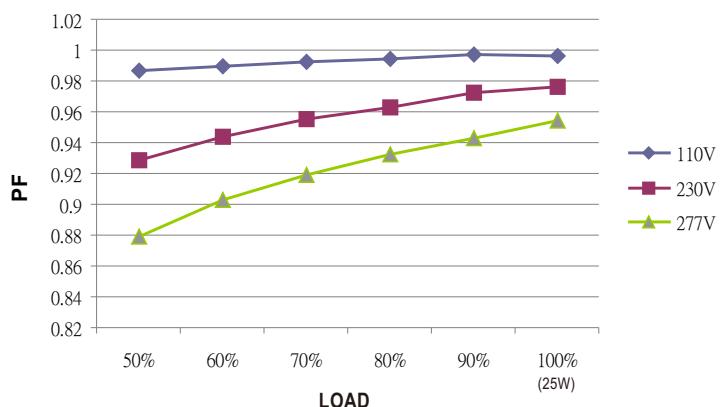


## ■ Derating Curve

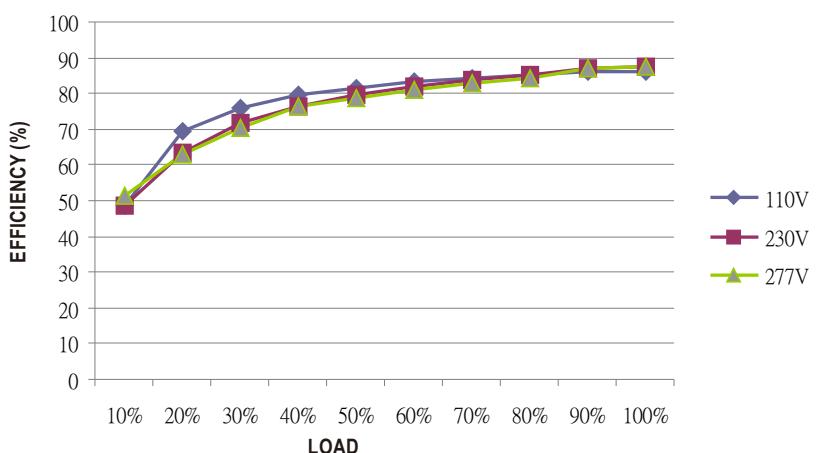


## ■ Static Characteristics

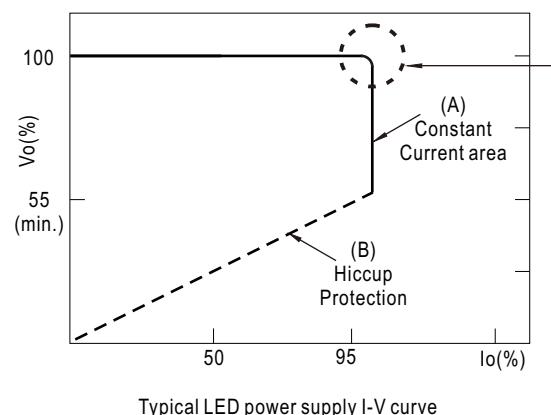


**■ Power Factor Characteristic**
**Constant Current Mode**

**■ EFFICIENCY vs LOAD (48V Model)**

LPF-25D series possess superior working efficiency that up to 86% can be reached in field applications.


**■ DRIVING METHODS OF LED MODULE**

This LED power supply is suggested to work in constant current mode area (CC) to drive the LEDs.



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.  
Should there be any compatibility issues, please contact MEAN WELL.

## ■ DIMMING OPERATION



※ Output constant current level can be adjusted through output cable by 1 ~ 10Vdc, 10V PWM signal or resistance between DIM+ and DIM-.

※ Reference resistance value for output current adjustment (Typical)

Resistance value	Single driver	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
Multiple drivers (N=driver quantity for synchronized dimming operation)	10KΩ/N	20KΩ/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80KΩ/N	90KΩ/N	100KΩ/N	-----	
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%	

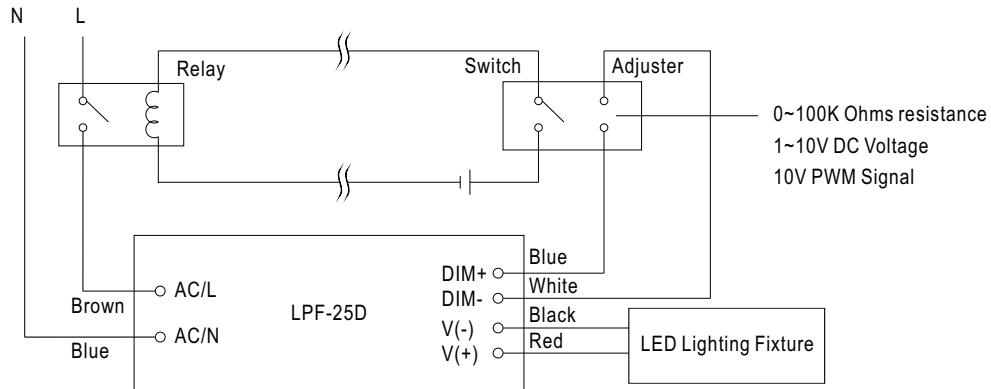
※ 1 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Output current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

※ 10V PWM signal for output current adjustment (Typical): Frequency range :100~3KHz

Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Output current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95%~108%

Dimming connection diagram for turning the lighting fixture ON/OFF :



Using a switch and relay can turn ON/OFF the lighting fixture.

1. Output constant current level can be adjusted through output cable by connecting a resistor or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
2. The LED lighting fixture can be turned ON/OFF by the switch.