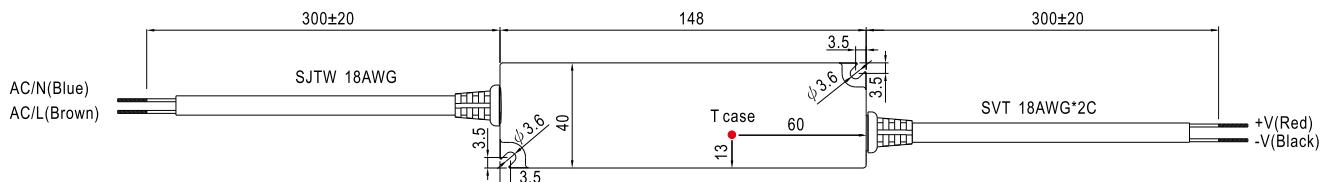



**SPECIFICATION**


MODEL	LPF-16-12	LPF-16-15	LPF-16-20	LPF-16-24	LPF-16-30	LPF-16-36	LPF-16-42	LPF-16-48	LPF-16-54
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>	1.34A	1.07A	0.8A	0.67A	0.54A	0.45A	0.39A	0.34A
	<b>RATED POWER</b>	16.08W	16.05W	16W	16.08W	16.2W	16.2W	16.38W	16.2W
	<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.6</b>	1500ms, 80ms / 115VAC at full load	1500ms, 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%	86%	86%	86%	86%	86%	86%
	<b>AC CURRENT</b>	0.4A / 115VAC	0.25A / 230VAC	0.2A / 277VAC					
PROTECTION	<b>INRUSH CURRENT (Typ.)</b>	COLD START 45A(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								
	<b>SHORT CIRCUIT</b>	Hiccup mode, recovers automatically after fault condition is removed.							
ENVIRONMENT	<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>	100°C ± 5°C (TSW1) Detect on U2							
	Protection type : 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)							
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes							
OTHERS	<b>SAFETY STANDARDS</b>	UL8750, CSA C22.2 No. 250.0-08, EN61347-1, EN61347-2-13 independent, EN62384, J61347-1, J61347-2-13 approved, IP67 (optional); Design refer to UL60950-1, TUV EN60950-1							
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:3.75KVAC							
	<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 (≥ 50% load); EN61000-3-3							
NOTE	<b>EMC IMMUNITY</b>	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge 2KV), criteria A							
	<b>MTBF</b>	473.3Khrs min. MIL-HDBK-217F (25°C)							
	<b>DIMENSION</b>	148*40*32mm (L*W*H)							
	<b>PACKING</b>	0.21Kg; 40pcs/9.4Kg/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 50% ~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. 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. 7. 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. 8. Suitable for indoor use.								

## ■ Mechanical Specification

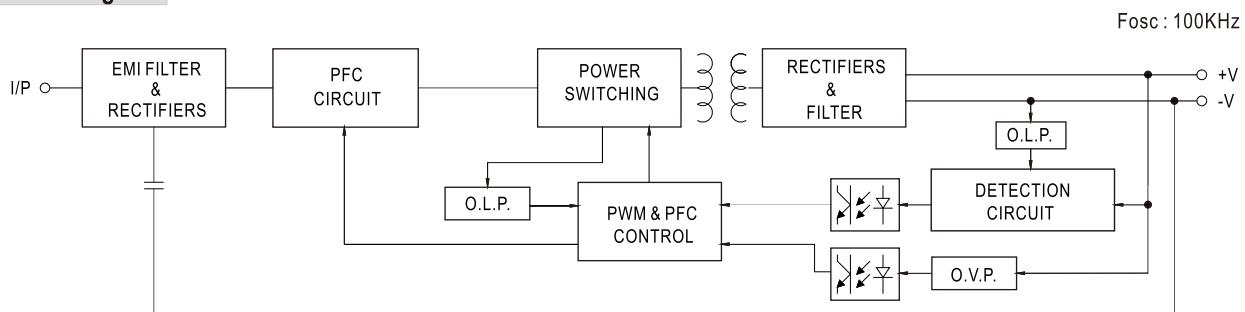
Case No. : LPF-16A Unit:mm



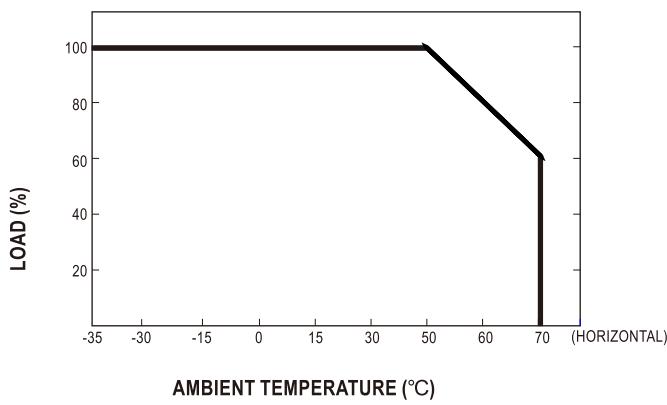
## ■ Recommend Mounting Direction



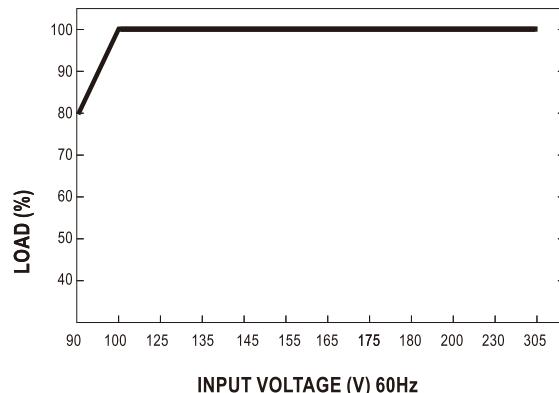
## ■ Block Diagram



## ■ Derating Curve

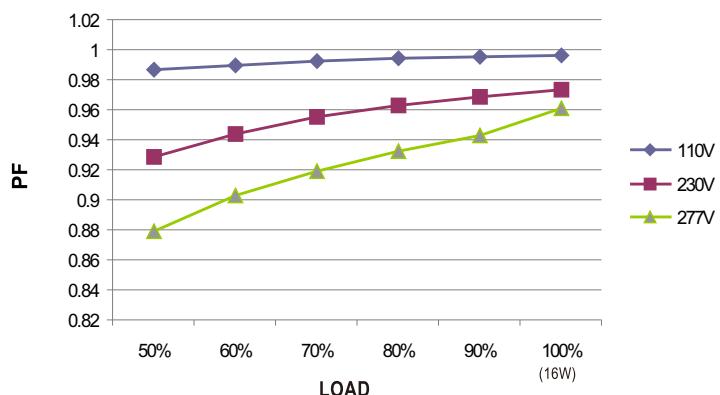


## ■ Static Characteristics



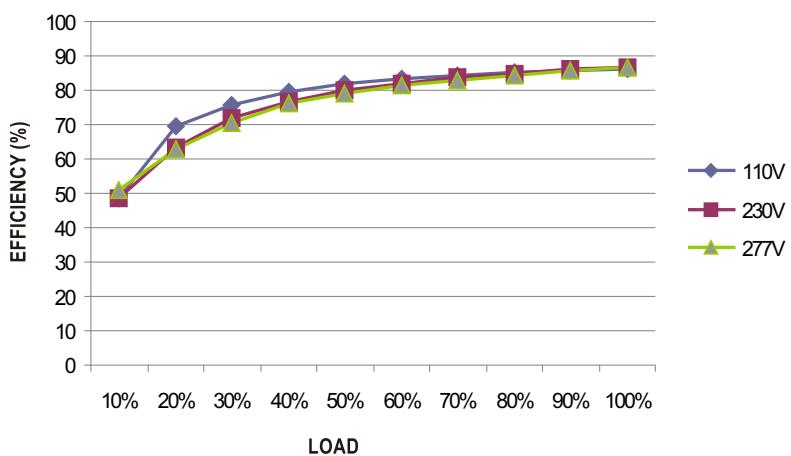
### ■ Power Factor Characteristic

#### Constant Current Mode



### ■ EFFICIENCY vs LOAD (48V Model)

LPF-16 series possess superior working efficiency that up to 86% can be reached in field applications.

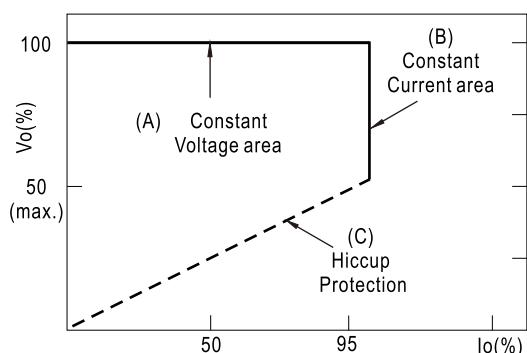


### ■ DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode (with LED driver, at area (A) and CC mode (direct drive, at area (B).



Typical LED power supply I-V curve