25W Single Output LED Power Supply

PLD-25 series



Features :

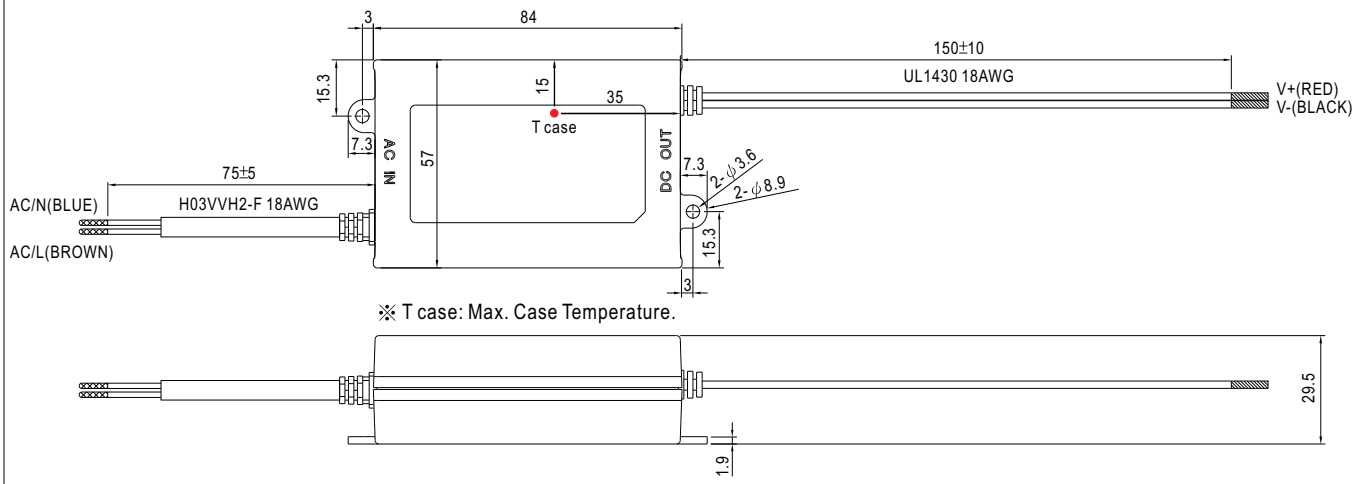
- Universal AC input / Full range (up to 295VAC)
- Built-in active PFC function
- Constant current design
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully isolated plastic case
- Class Ⅱ power unit, no FG
- 100% full load burn-in test
- Low cost
- High reliability
- Suitable for dry / damp locations
- 3 years warranty

SPECIFICATION

MODEL		PLD-25-350	PLD-25-700	PLD-25-1050	PLD-25-1400
OUTPUT	RATED CURRENT	350mA	700mA	1050mA	1400mA
	OPERATING VOLTAGE RANGE	36 ~ 58V	24 ~ 36V	16 ~ 24V	12 ~ 18V
	CURRENT RANGE	0 ~ 350mA	0 ~ 700mA	0 ~ 1050mA	0 ~ 1400mA
	CURRENT ACCURACY	±5.0%			
	RATED POWER	20.3W	25.2W	25.2W	25.2W
	RIPPLE & NOISE (max.) Note.1	4.6Vp-p	2.7Vp-p	2.2Vp-p	2Vp-p
	NO LOAD OUTPUT VOLTAGE (max.)	63V	50V	35V	25V
	SETUP TIME	1500ms / 230VAC 3000ms / 115VAC at full load			
INPUT	VOLTAGE RANGE	90 ~ 295VAC 127 ~ 417VDC			
	FREQUENCY RANGE	47 ~ 63Hz			
	POWER FACTOR (Typ.)	PF>0.98/115VAC, PF>0.92/230VAC, PF>0.91/277VAC at full load (Please refer to "Power Factor Characteristic" curve)			
	EFFICIENCY (Typ.)	85%	86%	85%	84%
	AC CURRENT (Typ.)	0.6A/115VAC 0.3A/230VAC			
	INRUSH CURRENT(max.)	40A/230VAC			
	LEAKAGE CURRENT	<0.5mA / 240VAC			
PROTECTION	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.			
	OVER TEMPERATURE	95℃ ±10℃ (RTH1)			
		Protection type : Shut down o/p voltage, re-power on to recover			
ENVIRONMENT	WORKING TEMP.	-30 ~ +60℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 95% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL8750, TUV EN61347-1, EN61347-2-13			
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH			
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≧75% load) ; EN61000-3-3, FCC part18 Class A			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024,EN61547, light industry level, criteria A			
OTHERS	MTBF	968.6Khrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	84*57*29.5mm (L*W*H)			
	PACKING	0.19Kg; 72pcs/14.7Kg/0.75CUFT			
NOTE	1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 2. Direct connecting to LEDs is suggested, but is not suitable for using additional drivers.				

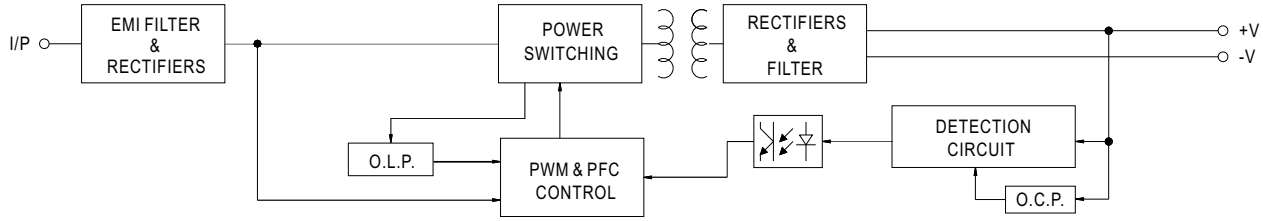
■ Mechanical Specification

Case No.PCD16A Unit:mm

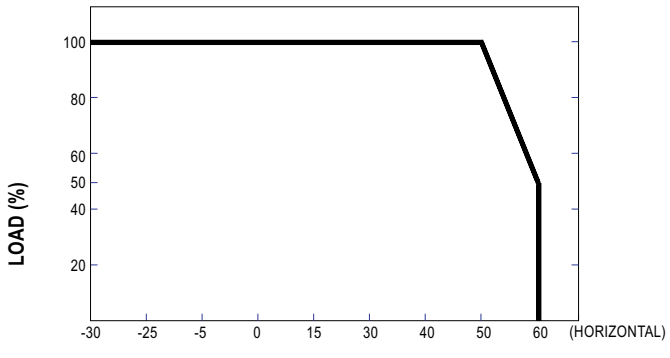


■ Block Diagram

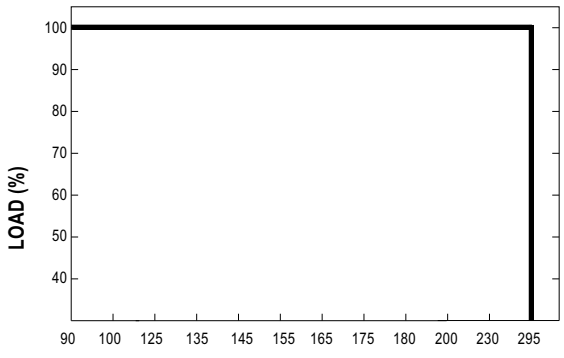
fosc : 90KHz(115VAC)
120KHz(230VAC)



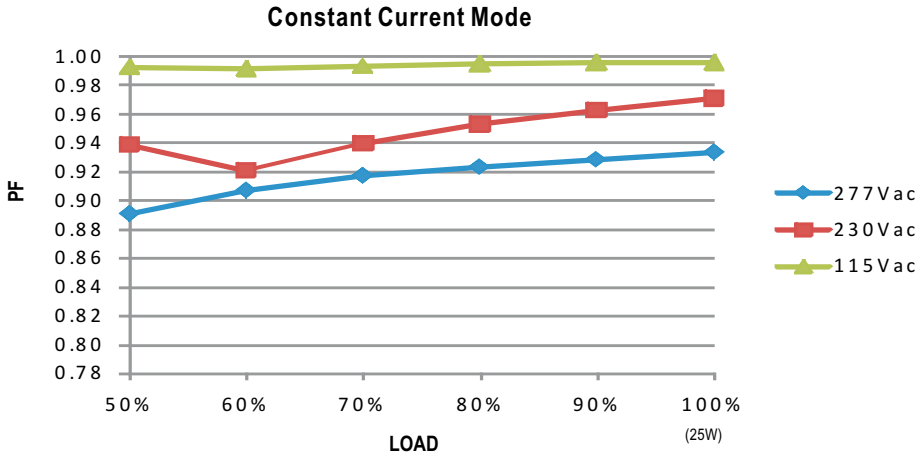
■ Derating Curve



■ Static Characteristics



■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (PLD-25-700)

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

