

25W 1-10V Constant Voltage LED Driver



Product Features

Built-in 3 in 1 dimming function (1~10VDC, PWM signal or resistance)

Fully encapsulated with IP67 level

Protections: Short circuit/ Overload/ Over voltage/ Over temperature

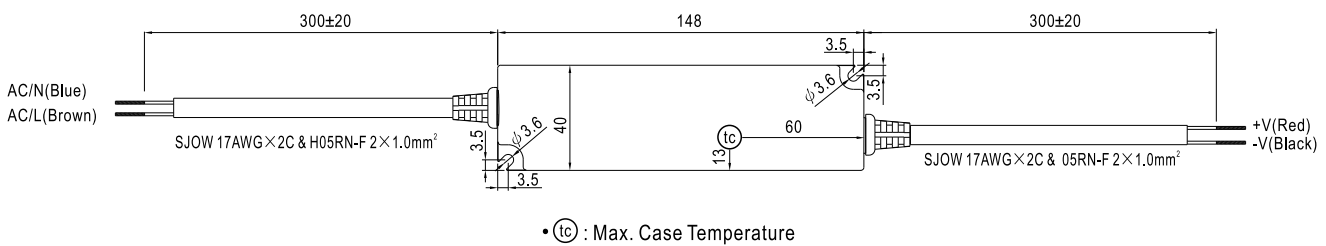
- Universal AC input (up to 305VAC) / Full Range
- Built-in active PFC function
- Fully isolated plastic case
- Isolation class II, no F.G.
- Class 2 power unit
- Suitable for dry, damp, wet location
- 5 years warranty



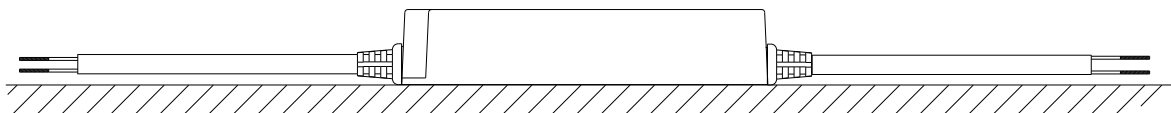
Product Description

If you're looking for something that will power your 1-10V dimming systems, then you've come to the right place – Mean Well's 25W 1-10V Constant Voltage LED Driver is well up to the task.

Technical Dimensions



Recommended Mounting Direction



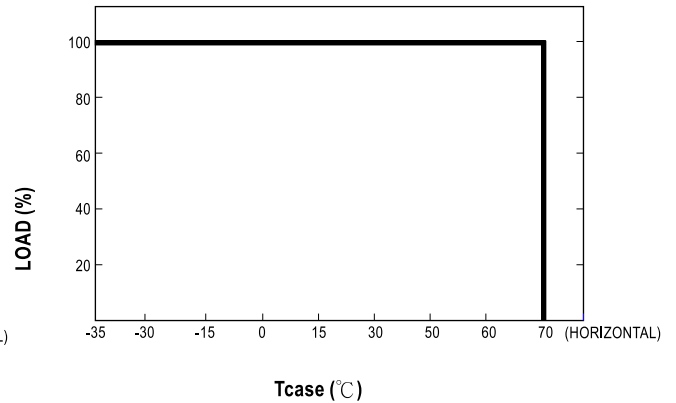
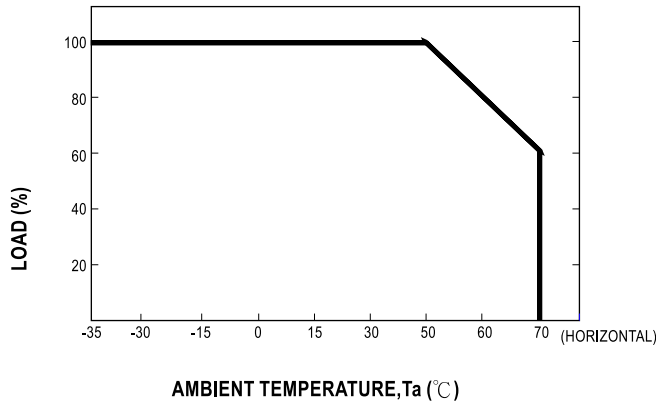
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Technical Specifications

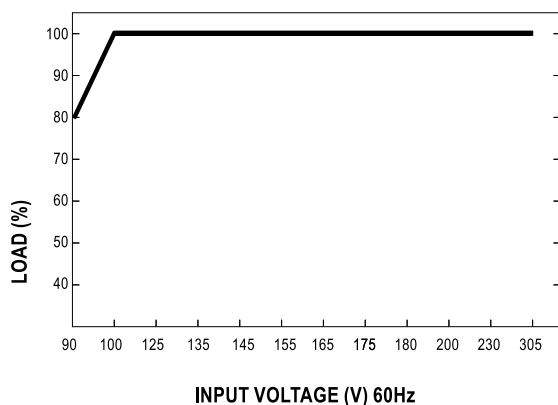
MODEL		LPF-25D-12	LPF-25D-15	LPF-25D-20	LPF-25D-24	LPF-25D-30	LPF-25D-36	LPF-25D-42	LPF-25D-48	LPF-25D-54	
OUTPUT	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V	
	RATED CURRENT	2.1A	1.67A	1.25A	1.05A	0.84A	0.7A	0.6A	0.53A	0.47A	
	RATED POWER <small>Note.5</small>	25.2W	25.05W	25W	25.2W	25.2W	25.2W	25.2W	25.44W	25.38W	
	CONSTANT CURRENT REGION <small>Note.2</small>	6.6 ~ 12V	8.25 ~ 15V	11 ~ 20V	13.2 ~ 24V	16.5 ~ 30V	19.8 ~ 36V	23.1 ~ 42V	26.4 ~ 48V	29.7 ~ 54V	
	CURRENT RIPPLE	5.0% max. @rated current									
	CURRENT TOLERANCE	±5.0%									
	SETUP, RISE TIME <small>Note.6</small>	1500ms, 80ms / 115VAC 500ms, 80ms / 230VAC									
HOLD UP TIME (Typ.)	16ms/230VAC		16ms/115VAC								
INPUT	VOLTAGE RANGE <small>Note.5</small>	90 ~ 305VAC 127 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)									
	FREQUENCY RANGE	47 ~ 63Hz									
	POWER FACTOR	PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)									
	TOTAL HARMONIC DISTORTION	THD < 20% (@load ≥ 60%/115VAC, 230VAC; @load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)									
	EFFICIENCY (Typ.)	84%	84%	85%	85.5%	85.5%	85.5%	85.5%	86%	86%	
	AC CURRENT	0.4A / 115VAC			0.25A / 230VAC			0.2A/277VAC			
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=200µs measured at 50% Ipeak) at 230VAC; Per NEMA 410									
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	12 units (circuit breaker of type B) / 21 units (circuit breaker of type C) at 230VAC									
PROTECTION	OVER CURRENT	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed									
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.									
	OVER VOLTAGE	15 ~ 18V	17.5 ~ 21V	23 ~ 27V	28 ~ 35V	34 ~ 40V	41 ~ 49V	46 ~ 54V	54 ~ 63V	59 ~ 66V	
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down									
ENVIRONMENT	WORKING TEMP.	Tcase=-35 ~ +70°C (Please refer to "OUTPUT LOAD vs TEMPERATURE" section)									
	MAX. CASE TEMP.	Tcase=+70°C									
	WORKING HUMIDITY	20 ~ 95% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)									
SAFETY & EMC	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes									
	SAFETY STANDARDS <small>Note.8</small>	UL8750, CSA C22.2 No. 250.0-08, ENEC EN61347-1, EN61347-2-13 independent, EN62384, EAC TP TC 004, GB19510.1, GB19510.14, IP67 approved ;Design refer to UL60950-1, TUV EN60950-1									
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION <small>Note.8</small>	Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 55%) ; EN61000-3-3, GB17743 and GB17625.1, EAC TP TC 020									
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, light industry level (surge immunity Line-Line 2KV), EAC TP TC 020									
	MTBF	1190.8K hrs min. Telcordia SR-332 (Bellcore); 418.5Khrs min. MIL-HDBK-217F (25°C)									
	DIMENSION	148*40*32mm (L*W*H)									
NOTE	PACKING	0.36Kg; 40pcs/ 15.4Kg/1.02CUFT									
	NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. Please refer to "DRIVING METHODS OF LED MODULE". Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time. The driver 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. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED driver can only be used behind a switch without permanently connected to the mains. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 70°C or less. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com 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). For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf 									

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Output Load vs Temperature

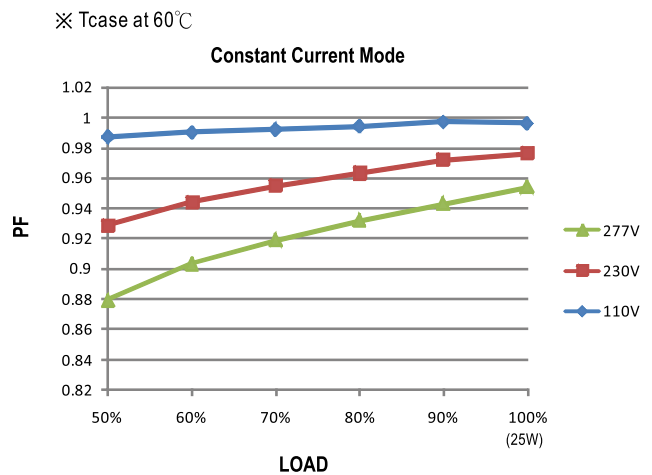


Static Characteristic



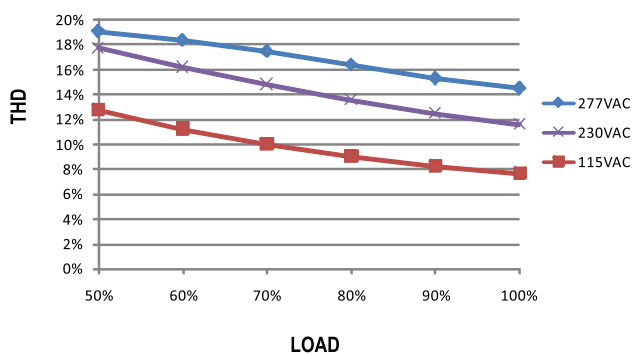
※ De-rating is needed under low input voltage.

Power Factor(PF) Characteristic



Total Harmonic Distortion

※ 48V Model, Tcase at 60°C



Efficiency vs Load

LPF-25 series possess superior working efficiency that up to 87% can be reached in field applications.

※ 48V Model, Tcase at 60°C

