

12W LED Driver Constant Current



Features

- Class I&II, SELV, Built-in
- Input Voltage 100-240VAC
- Protections: SCP/OLP/OVP/OTP
- Power Factor : 0.9C
- Efficiency : $\geq 82\%$ @300-500mA; $\geq 80\%$ @700mA
- 5 years warranty

Applications

LED spot light, Wall light

Approve

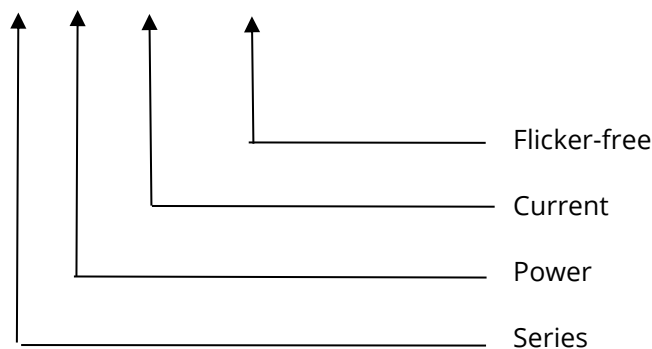


Description

SH-12-XXX LB-G is a 12W constant current LED driver with 300mA to 700mA output current. With its compact dimensions from 68.5 x 35 x 23.2 mm it is easy to integrate in wall light and LED spot light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

Model code

SH-12-XXX LB-G



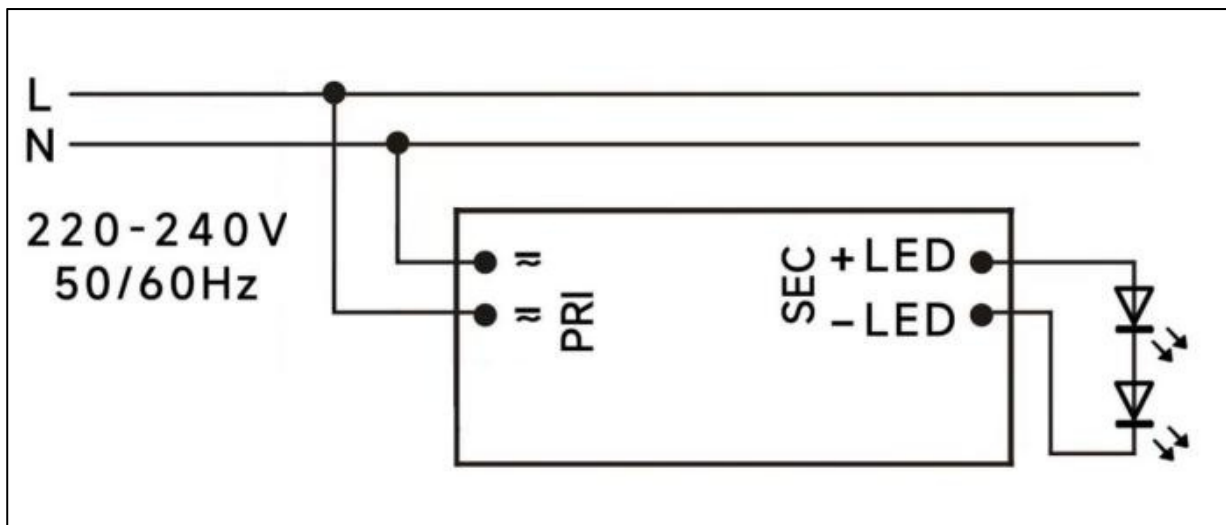
Specification

Output	Constant Current	300mA	350mA	500mA	700mA
	Unload voltage Max.	50VDC	45VDC	35VDC	25VDC
	Voltage Range	25-42VDC	20-36VDC	16-27VDC	11-18.5VDC
	Current Accuracy	±5%			
	Output HF current ripple(≥1KHz)	±3%			
	Output LF current ripple(≤120Hz)	±3%			
	SVM	≤0.4			
	Pst	≤1			
	Efficiency(Typ.)	≥82%@FullLoad,300-500mA; ≥80%@FullLoad,700mA			
Input	Rated input voltage	100-240VAC			
	Range of input voltage	90-264VAC			
	Frequency(Hz)	50/60Hz			
	Displacement factor	≥0.5			
	Power Factor	0.9C			
	Input Current max	0.19A			
	Start-up time	<0.5S			
	No Load Power	≤0.5W			
	THD(Typ.)	<15%			
Protection	Over Load Protection	103-120% YES/Auto Resume			
	Over Voltage Protection	>50VDC	>45VDC	>35VDC	>25VDC
	Short circuit Protection	YES/AutoResume			
	Over Temperature Protection	YES/AutoResume			
	Lifetime	>50000h@Tc=75°C,230VAC			
Environment	Operating Temperature	-20°C~+50°C			
	Humidity	20%-90%RH			
	Tc	85°C			
	Storage Temperature	-20°C~+60°C			
	Lifetime	>50000h@Tc=75°C,230VAC			
Surface	Dimension	68.5x35x23.2(LXWXH)mm			
s tandards	EN61347-1; EN61347-2-13;EN62384; EN55015;EN61000-3-2 ;EN61000-3-3; EN61547;				
Others	ErP	EU2019/2020			
	RoHS	RoHS(2011/65/EU)		(EU)2015/863	
Note	<p>1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.</p> <p>2.Ripple & Noise are measured at 20MHz of bandwidth by us25ing a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor</p>				

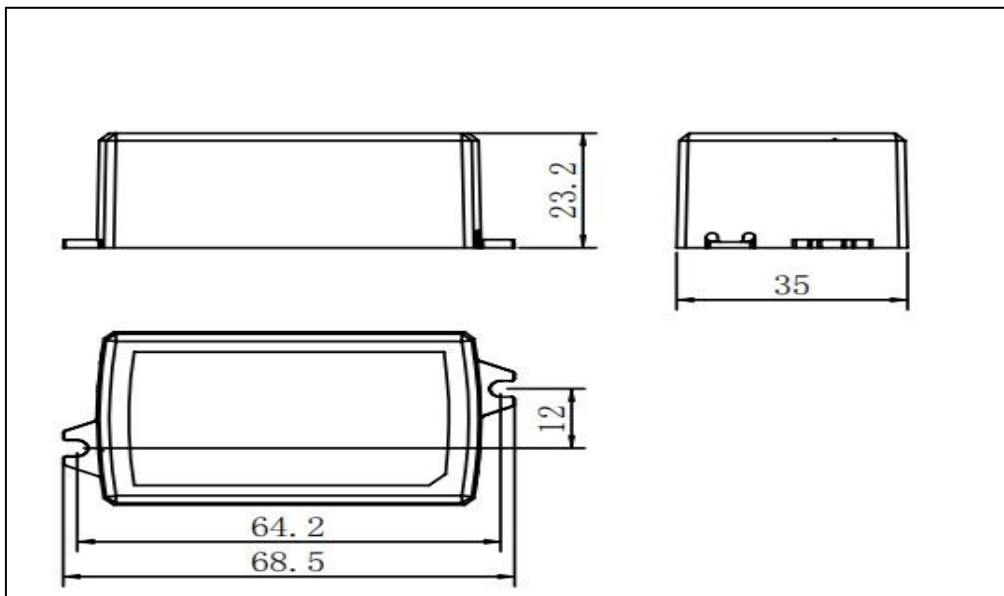
Circuit Breaker

Ipeak	Tw idth	B10	B16	B20	C10	C16	C20
10A	50μs	42pcs	67pcs	84pcs	42pcs	67pcs	84pcs

Wiring diagram

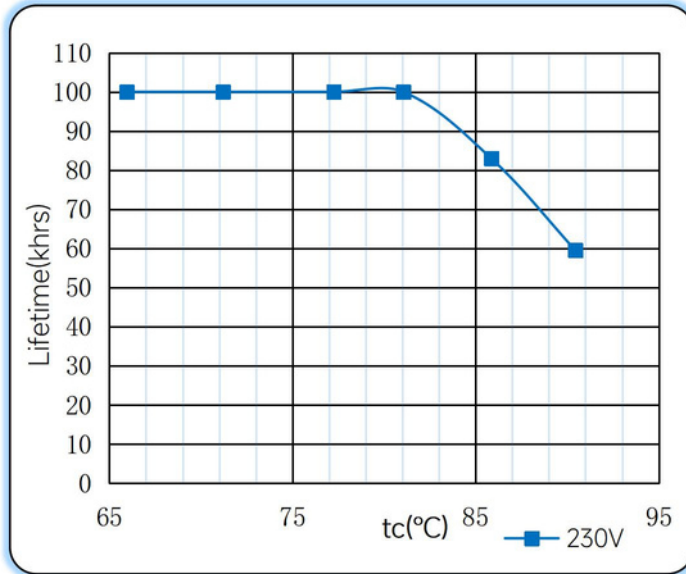


2D diagram

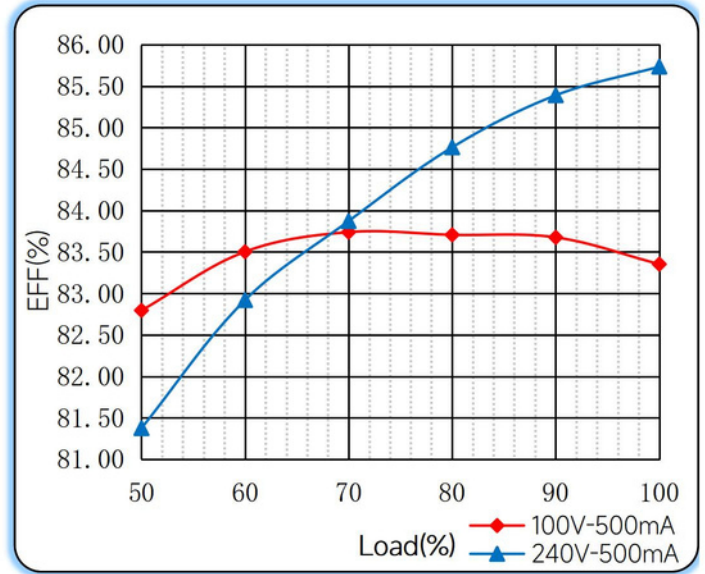


Curve for SH-12-500 LB-G, I_o=500mA

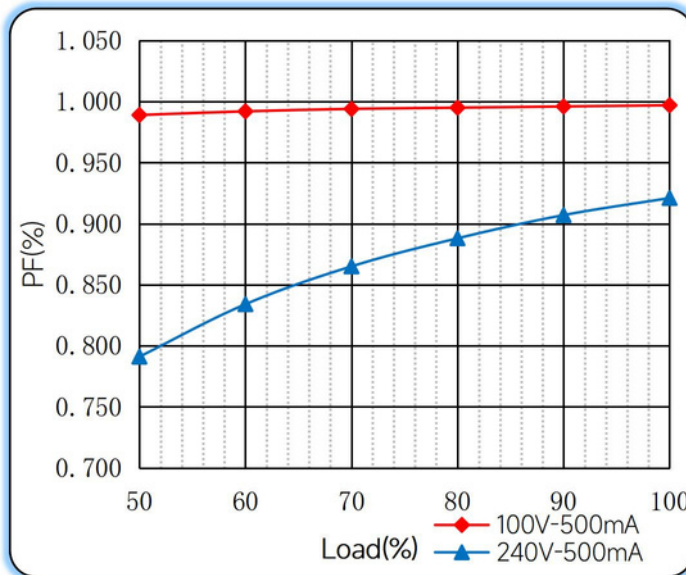
Lifetime vs. Temperature Curve



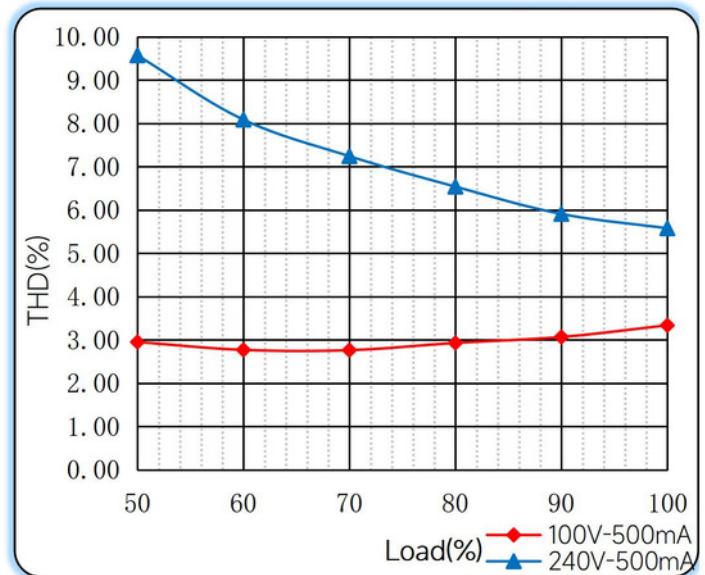
Efficiency vs. Load



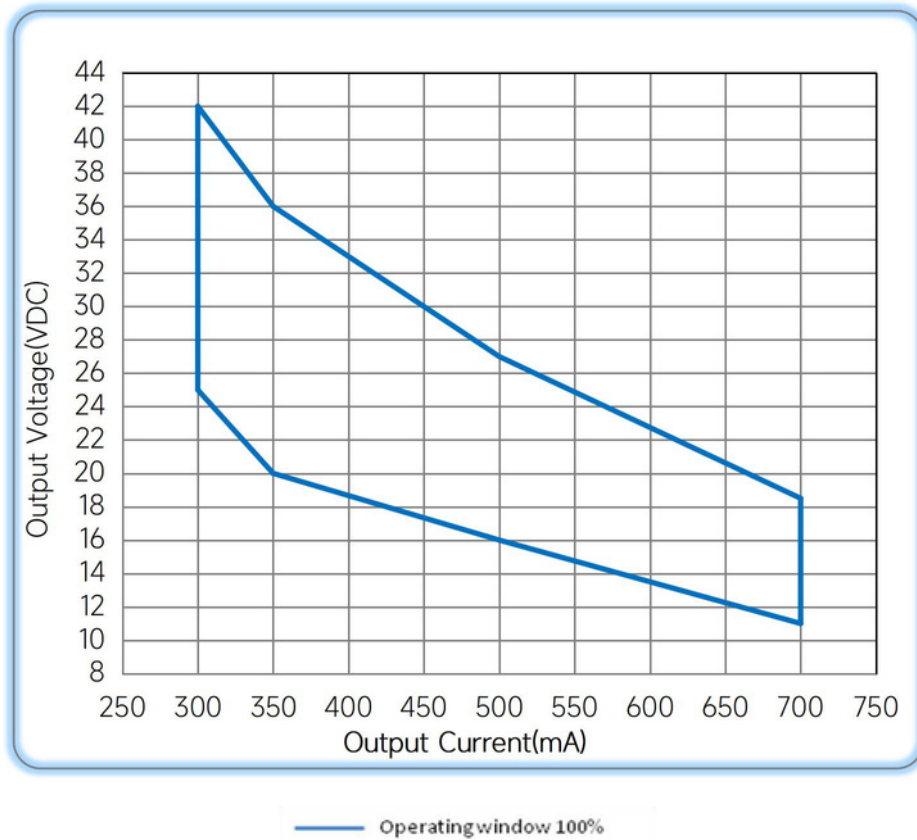
Power Factor Characteristics



THD vs. Load



Operating window



Revision Updates

ITEM	BEFORE	AFTER	VERSION	DATE
Initial			A	2022/05/15