

# **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 :>82%@300-500mA;>80%@700mA
- 5 years warranty

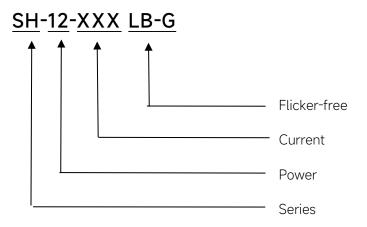
#### Applications

• LED spot light、Wall light

#### Description

SH-12-XXX LB-G is a 12W constant current LED driver with 300mA to 700mA output current. With it's 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





# Specification

Output	Constant Current	300mA	350mA	500mA	600mA	700mA		
	Unload voltage Max.	50VDC	45VDC	35VDC	27VDC	25VDC		
	Voltage Range	25-42VDC	20-36VDC	16-27VDC	11-19VDC	11-18.5VDC		
	Current Accuracy	±5%		10 27 7 20				
	Output HF current ripple(>1KHz)							
	Output LF current ripple(<120Hz)							
	SVM	≤0.4						
	Pst	<0.4 <1						
	Efficiency(Typ.)							
		>82%@Full Load,300-500mA; >80%@Full Load,600-700mA						
Input	Rated input voltage 100-240VAC							
	Range of input voltage	90-264VAC	• •	• • • •				
	Maximum voltage		maximum,unit r	night not opera	te in this abno	rmal condition		
	Frequency(Hz)	50/60 Hz						
	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%						
	Over Load Protection	103-130%						
		YES/Auto Resume						
Protection	Over Voltage Protection	> 50VDC YES/Auto Res	> 45VDC	> 35VDC	> 27VDC	> 25VDC		
	Short circuit Protection	YES/Auto Resume						
,	Surge capability (L-N)	1KV						
capability	Surge capability (L/N-Ground)	NA						
	Operating Temperature -20°C~+50°C							
	Humidity	20%-90%RH						
Environment	Тс	85°C						
	Storage Temperature	-20°C~+60°C						
	Life time	> 50000h@Tc=75°C,230VAC						
	Noise	<20dB(A)@10cm						
Surface	Dimension	68.5 x 35 x 23.2 (LXWXH)mm						
	material PC							
standards	EN 61347-1; EN61347-2-13; EN62384; EN55015; EN61000-3-2 ; EN61000-3-3; EN 61547;							
Others	ErP	EU 2019/2020	)					
	RoHS	RoHS (2011/65/EU) (EU)2015/863						



## SH-12-XXX LB-G

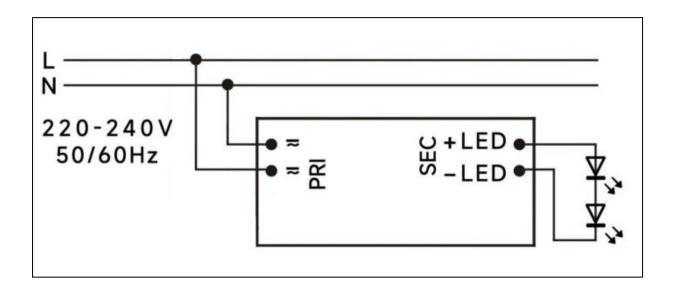
	1.All parameters NOT specially mentioned are measured at 230VAC input , full load and 25°C of ambient temperature.					
Note	2.Ripple & Noise are measured at 20MHz of bandwidth by us25ing a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF					
	parallel capacitor					
	3. The over-temperature protection of the product is provided by the IC.					
	4.All Eaglerise power supply are complied with EMI regulations. Since they are belong to component and will be installed inside					
	system enclosure. When they are integrated into a system, the EMI characteristics of the system must be re-verified again.					



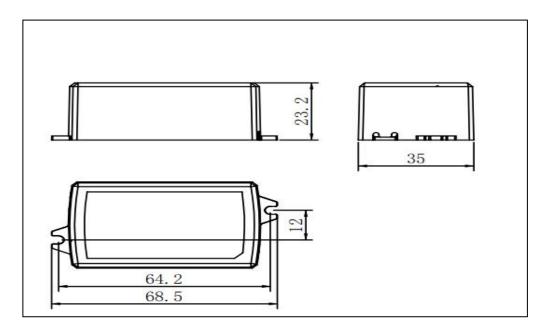
## Circuit Breaker

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

## Wiring diagram



### ♦ 2D diagram



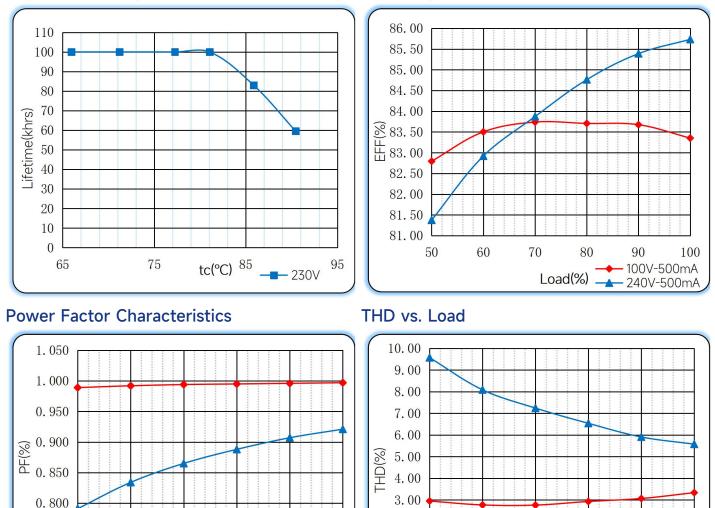


#### ◆ Curve for SH-12-500 LB-G, lo=500mA

Lifetime vs. Temperature Curve

Efficiency vs. Load

SH-12-XXX LB-G



2.00

1.00

0.00

50

60

70

80

Load(%)

90

100

100V-500mA

-240V-500mA

0.750

0.700

50

60

70

80

-•

Load(%) \_\_\_\_ 240V-500mA

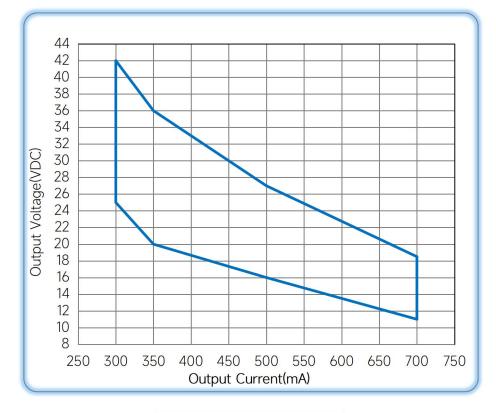
90 - 100V-500mA

100



### SH-12-XXX LB-G

### Operating window



Operating window 100%

#### Revision Updates

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

Remark: The final interpretation of the contents of the specification belongs to Astralux.

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