

12W LED Driver Constant Current



Features

- Class II&I, SELV, built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor : 0.8
- Efficiency $\geq 81\%$
- 5 years warranty

Applications

- LED spot light 、 LED down light、
- Wall light

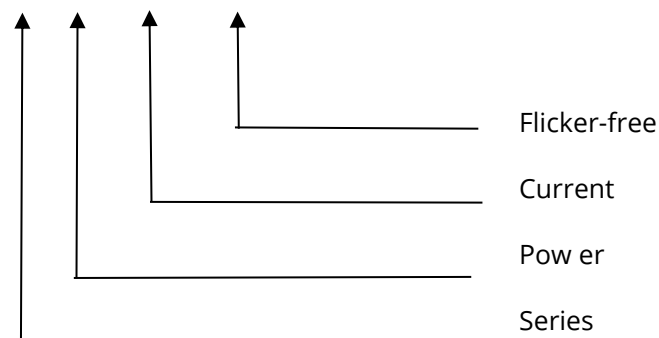


Description

SS-12-XXX MB-G is a 12W constant current LED driver with 250 to 700mA output current. With it's compact dimensions from 60x 34 x 23.5 mm it is easy to integrate in LED spot, down light and Wall light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

Model code

SS-12-XXX MB-G



Specification

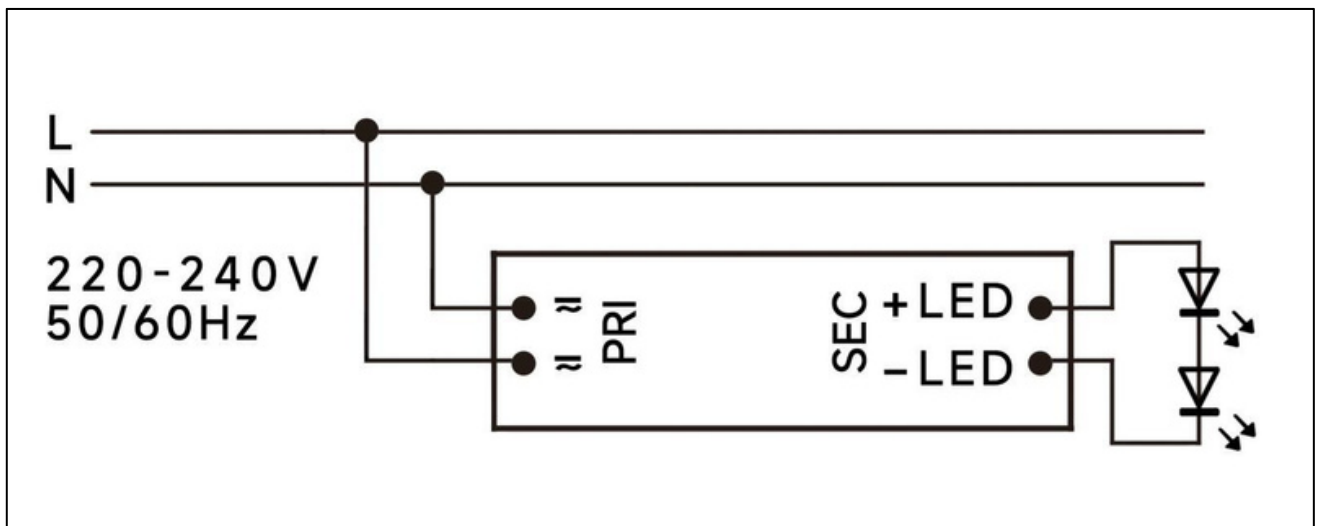
Output	Constant Current	250mA	300mA	350mA	...	700mA
	Voltage Range	28.5-48V	24-40V	20-34.5V	...	10-18V
	Unload voltage Max.	60V	50V	45V	...	28V
	Current Accuracy	±7%				
	Output HF current ripple(≥1KHz)	±5%				
	Output LF current ripple(≤120Hz)	±5%				
	SVM	≤0.4				
	Pst	≤1				
	Efficiency(Typ.)	≥81%				
Input	Rated input voltage	220-240VAC				
	Range of input voltage	176-264VAC				
	Frequency(Hz)	50/60Hz				
	Power Factor	>0.8				
	Input Current max	0.12A				
	Start-uptime	<0.5S				
	No Load Power	≤0.5W				
Protection	Over Load Protection	103-120%				
		YES/Auto Resume				
	Over Voltage Protection	>60V	>50V	>45V	...	>28V
		YES/Auto Resume				
	Short circuit Protection	YES/AutoResume				
Over Temperature Protection	YES/AutoResume					
Environment	Operating Temperature	-20°C~+50°C				
	Humidity	20%-90%RH				
	Tc	80°C				
	Storage Temperature	-40°C~+60°C				
	Lifetime	>50000h@Tc=65°C,230VAC				
Surface	Dimension	60X34X23.5(LXWXH)mm				
s standards	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 using a 300mm twisted pair-wire terminated with a 0.1uF & 47 uF parallel capacitor.</p>					

Model list

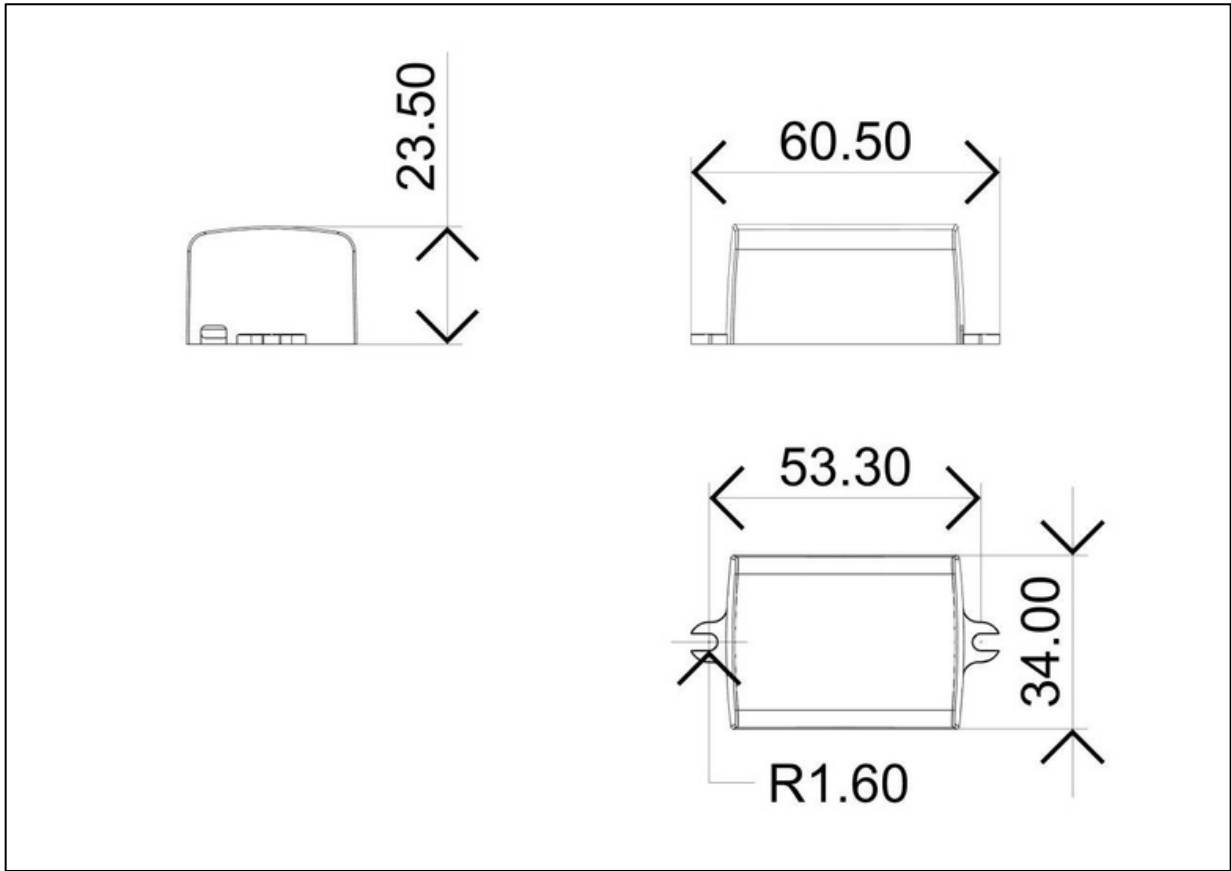
No	Model number	Input			Output			
		Voltage (VAC)	Max.Current (A)	Frequency (Hz)	Constant current (mA)	Normal working voltage(VDC)	No-load working voltage(VDC)	Max. Power(W)
1	SS-12-250 MB-G	220-240	0.12	50/60	250	28.5-48	60	12
2	SS-12-300 MB-G				300	24-40	50	12
3	SS-12-350 MB-G				350	20-34.5	45	12.1
4	SS-12-400 MB-G				400	18-30	40	12
5	SS-12-450 MB-G				450	16-27	35	12.2
6	SS-12-500 MB-G				500	14.5-24	34	12
7	SS-12-550 MB-G				550	13-22	32	12.1
8	SS-12-600 MB-G				600	12-20	30	12
9	SS-12-650 MB-G				650	11-18.5	28	12
1	SS-12-700 MB-G				700	10-18	28	12.6

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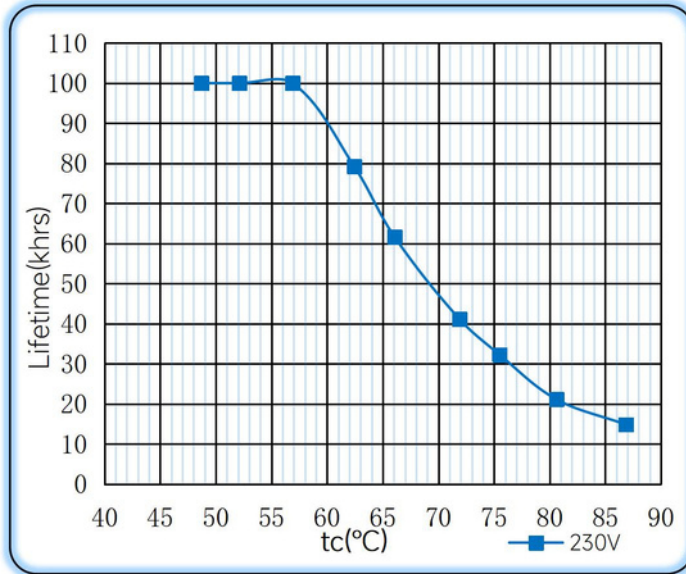
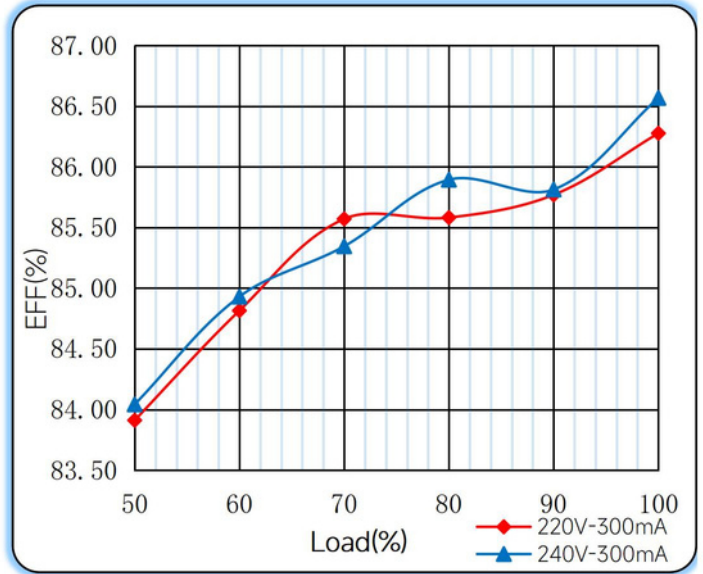
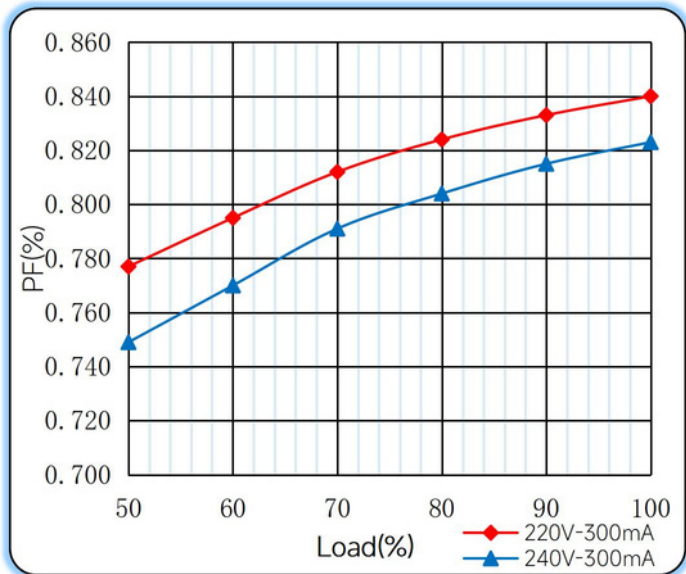
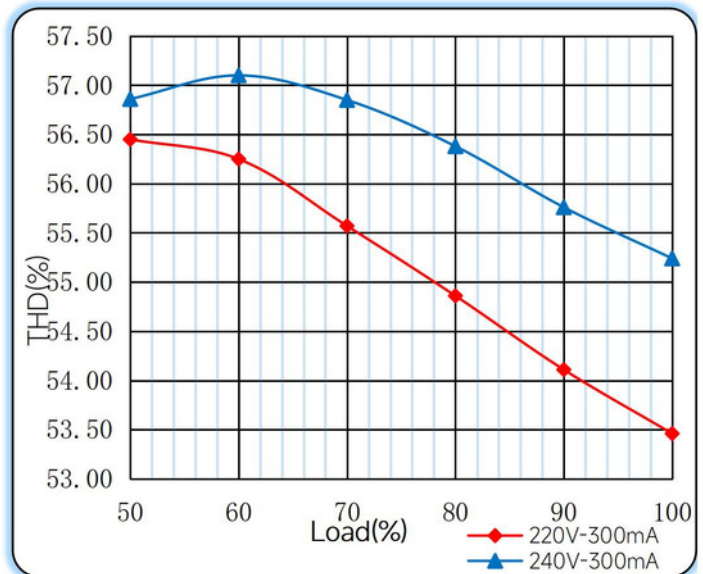
Wiring diagram



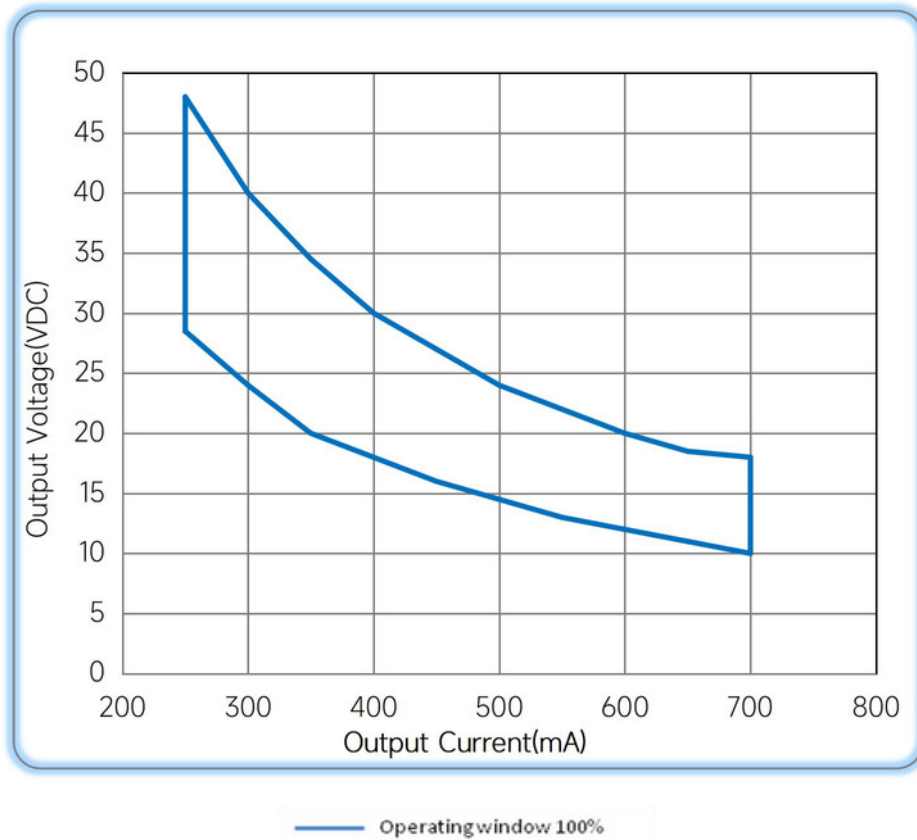
2D diagram



Curve for SS-12-300 MB-G, $I_o=300mA$

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
Model list		updated	B	2022/12/1