

6W Constant Current -LS Series

LS-6-XXX MB

■ Approve

SELV CE

■ Features

- Class II, SELV, Built-in
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor $\lambda = 0.7C$
- Efficiency $\geq 76\%$
- 5 years warranty

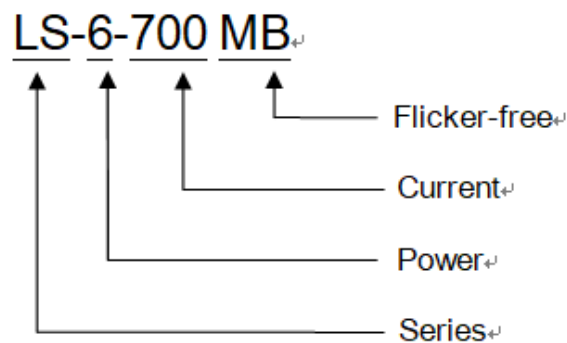
■ Applications

- LED panel
- LED spot light
- LED down light
- LED Wall light

■ Description

LS-6-XXX MB is a 6W constant current LED driver with 120 to 700mA output current. With its compact dimensions from 54 x 23 x 21 mm it is easy to integrate in LED Panel, spot, down light and wall light products. To ensure trouble-free operation, protection is provided against output short circuit and over Load.

■ Model code



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■ Specification

Input	Rated input voltage	220-240VAC			
	Range of input voltage	176-264VAC			
	DC voltage range	176-280V			
	Frequency(Hz)	0/50/60 Hz			
	Power Factor	$\lambda=0.7C@Full\ Load,230VAC$			
	Input Current max	0.07A MAX. @Full Load,176VAC			
	Start-up time	< 0.5S			
	Unload Power Consumption	$\leq 0.5W$			
	Inrush Current	10A Max.			
	Leakage Current	< 0.7mA(240VAC)			
	Output	Constant Current	120mA	150mA	...
Unload voltage Max.		59VDC	59VDC	...	20VDC
Voltage Range(VDC)		8.5-40VDC	8.5-40VDC	...	2.5-9VDC
Rated power		4.8 W Max.	6 W Max.	...	7W Max.
Current Accuracy		$\pm 5\%$ @Full Load , 230VAC			
Voltage Regulation		$\pm 5\%$ @Full Load , 220-240VAC			
Load Regulation		$\pm 5\%$ @220-240VAC			
Hold-up Time		1s max.@Full Load			
Ripple& Noise *Note.2		$\leq \pm 5\%$ @Full Load , 230VAC			
Output LF current ripple(<120Hz)		$\leq \pm 3\%$ @Full Load , 230VAC			
Efficiency(Typ.)		$\geq 76\%$			
Protection		Over Load Protection	103-180% Protection type: Auto Resume		
	Over Voltage Protection	> 59VDC	> 59VDC	...	> 20VDC
	Short circuit Protection	Protection type: Auto Resume			
Environment	Operating Temperature	-20°C...+50°C			
	tc	80°C			
	Storage Temperature	-25°C...+60°C			
	Life time	> 30,000h@50°C			
Others	Humidity	20%-90%RH			
	Dimension	54 x 23 x 21 (LXWXH)			
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384			
	Withstand voltage	Input-Output : 3750V/5mA/1min			
	Isolation resistance	Input-Output : $\geq 4M\Omega@500VDC$			
	EMI	EN55015; EN61000-3-2 Class C; EN61000-3-3			
	EMS	EN 61547; EN 61000-4-2; EN 61000-4-5 —500V;			
Note	1.All parameters NOT specially mentioned are measured at 230VACinput , full load and 25°C of ambient temperature. 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.				

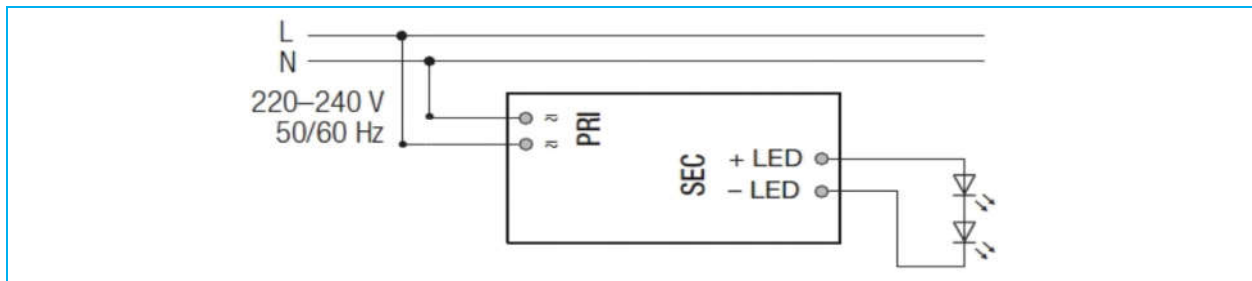
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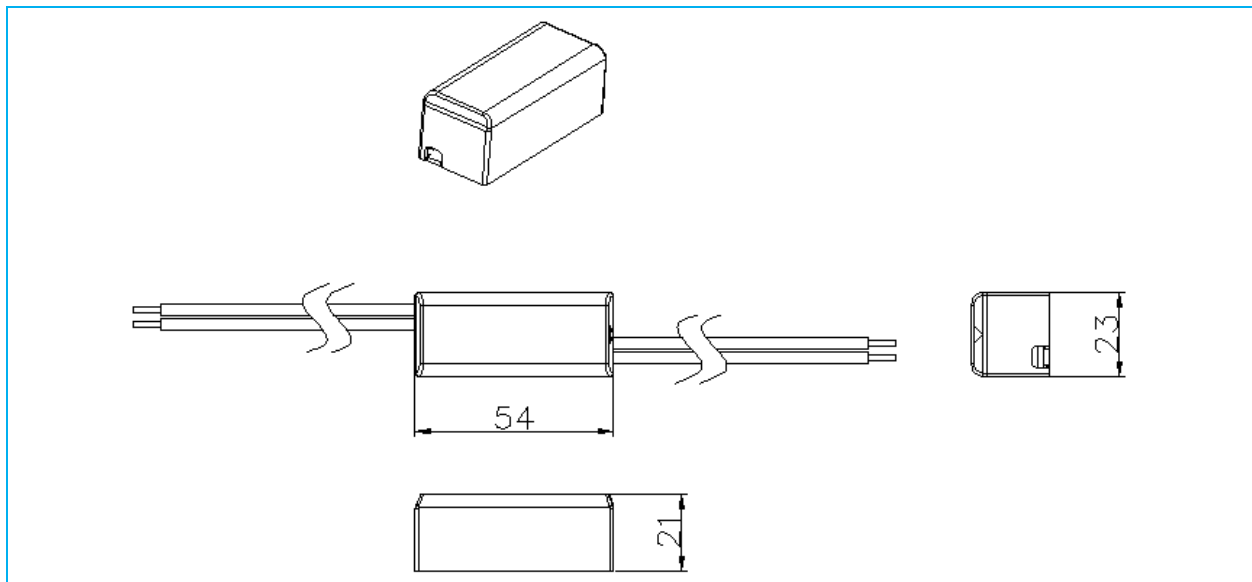
Model list

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	LS-6-120 MB	220-240	0.07	50/60	120	8.5-40	59	4.8
2	LS-6-150 MB	220-240	0.07	50/60	150	8.5-40	59	6
3	LS-6-200 MB	220-240	0.07	50/60	200	7.5-30	45	6
4	LS-6-250 MB	220-240	0.07	50/60	250	5-24	35	6
5	LS-6-300 MB	220-240	0.07	50/60	300	5-20	34	6
6	LS-6-350 MB	220-240	0.07	50/60	350	5-18	25	6.3
7	LS-6-400 MB	220-240	0.07	50/60	400	5-15	25	6
8	LS-6-450 MB	220-240	0.07	50/60	450	5-13.5	24	6.1
9	LS-6-500 MB	220-240	0.07	50/60	500	2.8-12	23	6
10	LS-6-550 MB	220-240	0.07	50/60	550	2.8-11	22	6.1
11	LS-6-600 MB	220-240	0.07	50/60	600	2.5-10	25	6
12	LS-6-650 MB	220-240	0.07	50/60	650	2.5-9.5	25	6.2
13	LS-6-700 MB	220-240	0.07	50/60	700	2.5-9	25	6.3

Wiring diagram



2D diagram

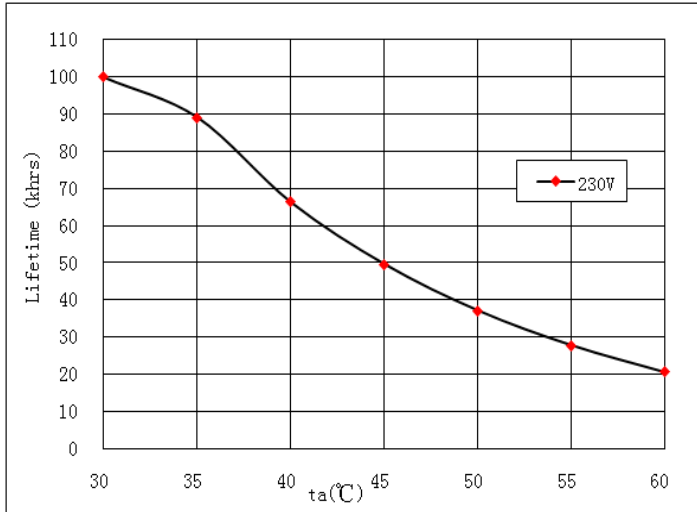


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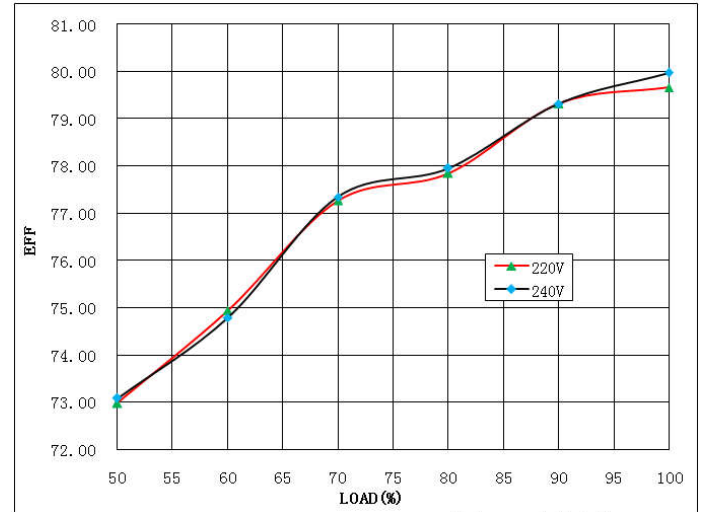
LS-6-XXX MB

■ Curve for LS-6-700 MB

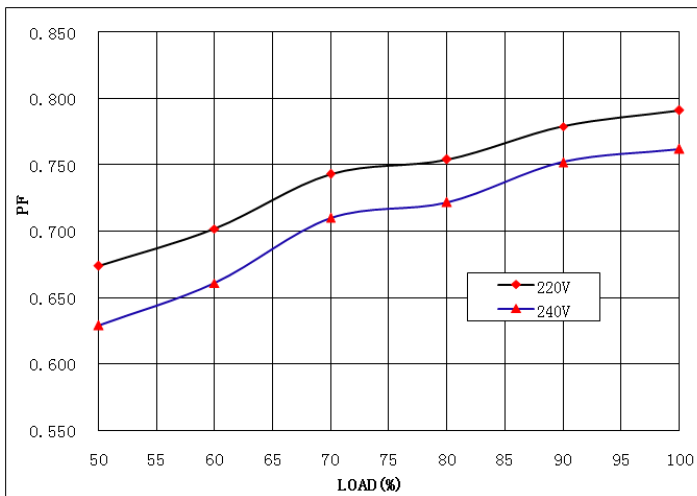
Lifetime vs. Ambient Temperature Curve



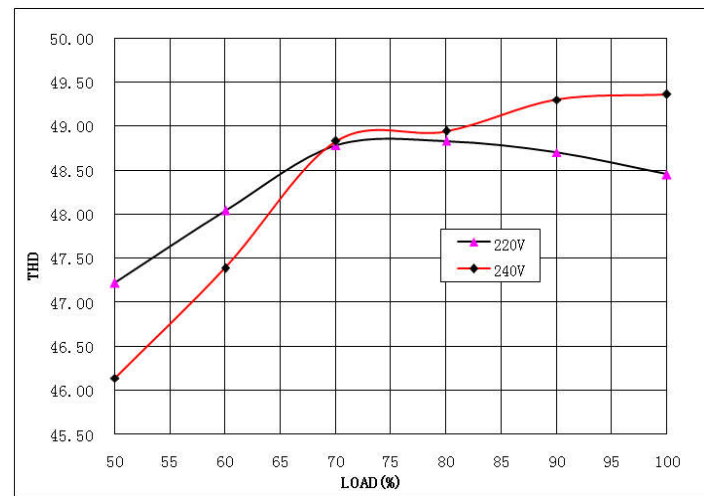
Efficiency vs. Load



Power Factor Characteristics



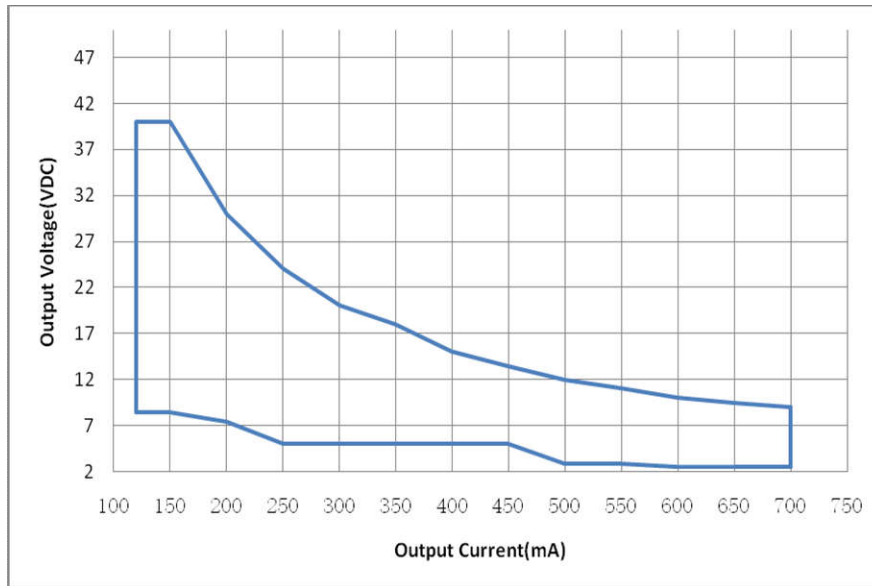
THD vs. Load (EN61000-3-2 Class A)



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■ Operating window



— Operating window 100%