

6W Constant Current -LS Series

LS-6-XXX SI



■ Approve

SELV CE

■ Features

- Class II, SELV, independent
- Input Voltage 220-240VAC
- Protections: SCP/OLP/OVP
- Power Factor 0.5
- Efficiency ≥76%
- 5 years warranty

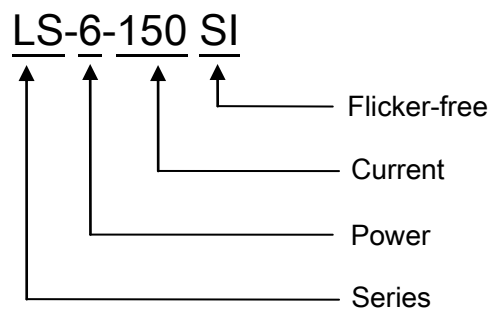
■ Applications

- LED panel
- LED spot light
- LED down light
- COB light

■ Description

LS-6-XXX SI is a 6W constant current LED driver with 120-700mA output current. With it's compact dimensions from 76 x 22 x 20 mm it is easy to integrate in LED Panel, spot, down light and COB 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	0.5±0.05@Full Load,240VAC				
	Input Current max	0.11A MAX. @Full Load,176VAC				
	Start-up time	< 0.5S				
	Unload Power Consumption	≤0.5W				
	Inrush Current	30A Max.				
	THD	< 200% @Full Load,240VAC				
	Leakage Current	< 0.7mA(240VAC)				
Output	Constant Current	120mA	150mA	200mA	...	700mA
	Unload voltage Max.	60VDC	60VDC	45VDC	...	16VDC
	Voltage Range(VDC)	8.5-40VDC	8.5-40VDC	7.5-30VDC	...	2.5-9VDC
	Rated power	4.8W Max.	6W Max.	6W Max.	...	6.3W Max.
	Current Accuracy	±5% @220-240VAC				
	Voltage Regulation	±5% @Full Load , 220-240VAC				
	Load Regulation	±5% @220-240VAC				
	Hold-up Time	1s max.@Full Load				
	Ripple& Noise *Note.2	≤±6% @Full Load , 240VAC				
	Output LF current ripple(<120Hz)	≤±5% @Full Load , 240VAC				
	Efficiency(Typ.)	≥76%				
Protection	Over Load Protection	103-150%				
		Protection type: Auto Resume				
	Over Voltage Protection	> 60VDC	>60VDC	>45VDC	...	>16VDC
	Protection type: Auto Resume					
	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				
	Humidity	20%-90%RH				
Others	Dimension	76X22X20(LXWXH)mm				
Safety & EMC	Safety standards	EN 61347-1; EN61347-2-13; EN62384				
	Withstand voltage	Input-Output : 3750V/5mA/1min				
	Isolation resistance	Input-Output : ≥4MΩ@500VDC				
	EMI	EN55015; EN61000-3-2 Class A; 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 240VAC input , 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. 3.Output current can be 120mA or from 150mA to 700mA and increasing in multiples of 50mA. Please see Model list below and contact EAGLERISE for details.					

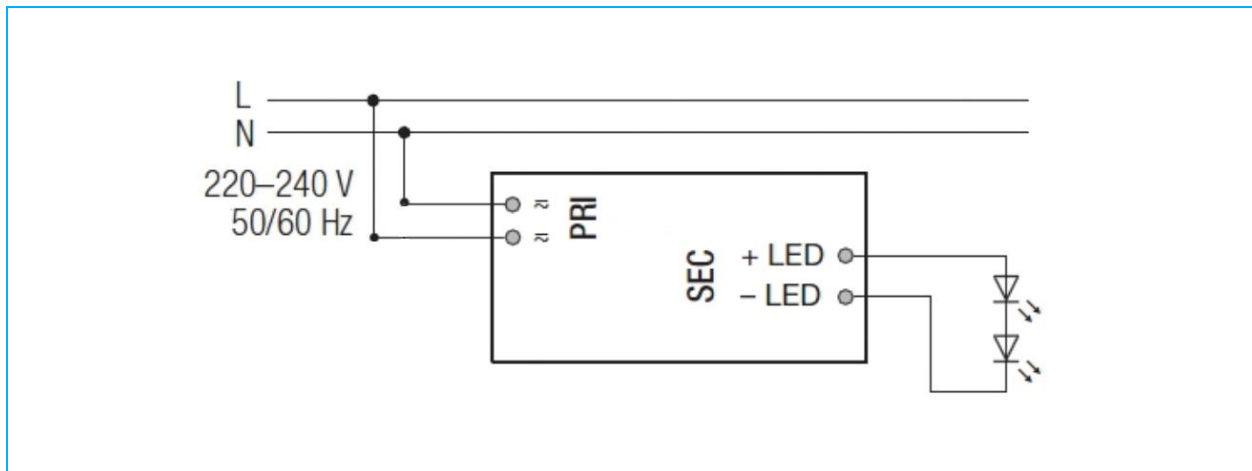
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Model list

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 SI	220-240	0.11	50/60	120	8.5-40	60	4.8
2	LS-6-150 SI	220-240	0.11	50/60	150	8.5-40	60	6
3	LS-6-200 SI	220-240	0.11	50/60	200	7.5-30	45	6
4	LS-6-250 SI	220-240	0.11	50/60	250	5-24	35	6
5	LS-6-300 SI	220-240	0.11	50/60	300	5-20	34	6
6	LS-6-350 SI	220-240	0.11	50/60	350	5-18	25	6.3
7	LS-6-400 SI	220-240	0.11	50/60	400	5-15	25	6
8	LS-6-450 SI	220-240	0.11	50/60	450	5-13.5	24	6.1
9	LS-6-500 SI	220-240	0.11	50/60	500	2.8-12	23	6
10	LS-6-550 SI	220-240	0.11	50/60	550	2.8-11	22	6.1
11	LS-6-600 SI	220-240	0.11	50/60	600	2.5-10	16	6
12	LS-6-650 SI	220-240	0.11	50/60	650	2.5-9.5	16	6.2
13	LS-6-700 SI	220-240	0.11	50/60	700	2.5-9	16	6.3

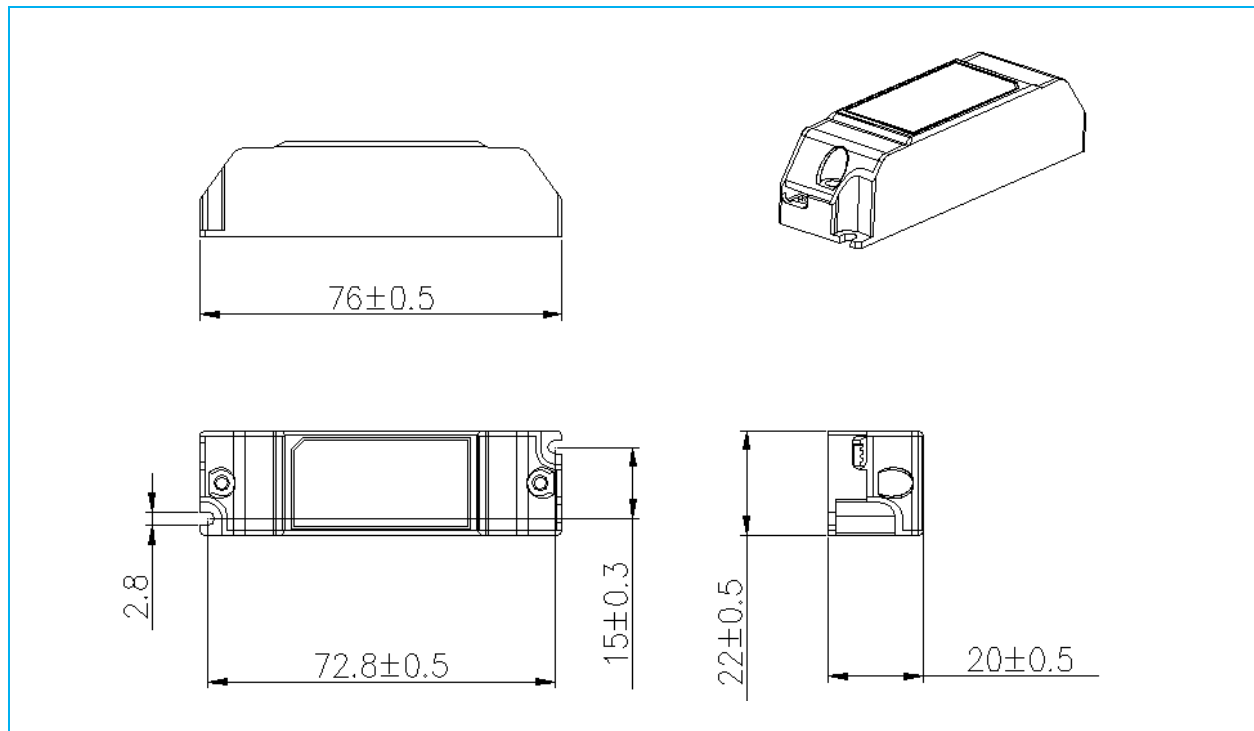
Wiring diagram



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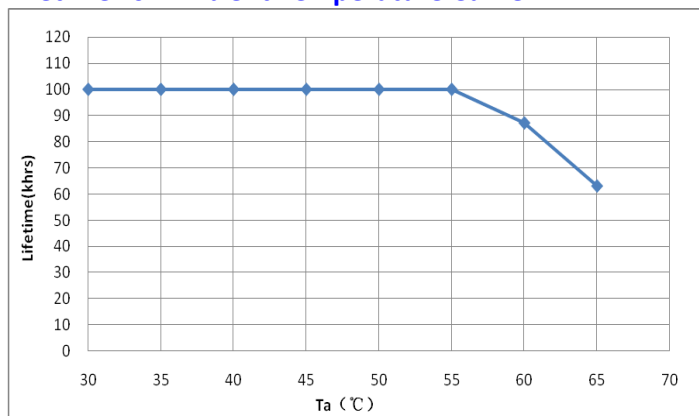
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2D diagram

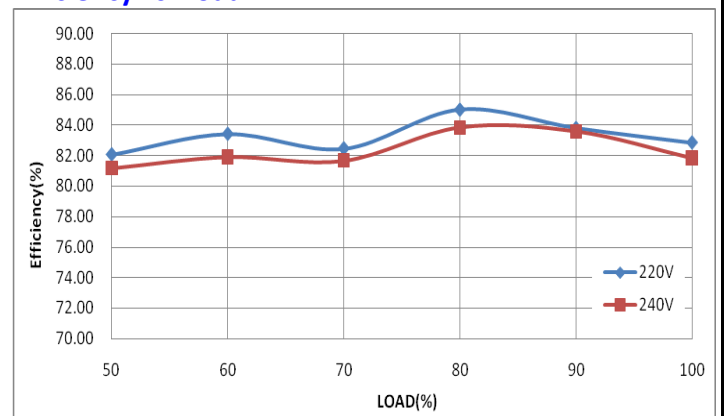


Curve @LS-6-150 SI

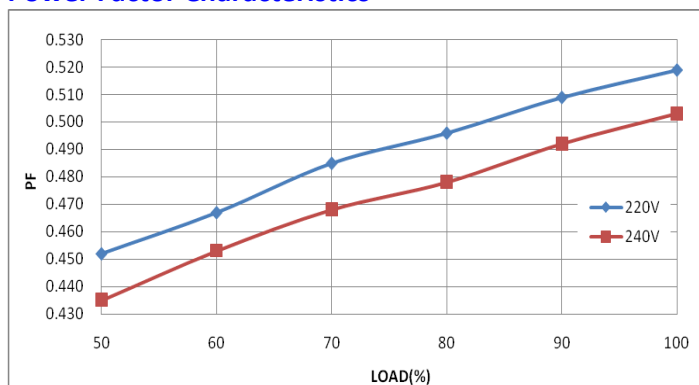
Lifetime vs. Ambient Temperature Curve



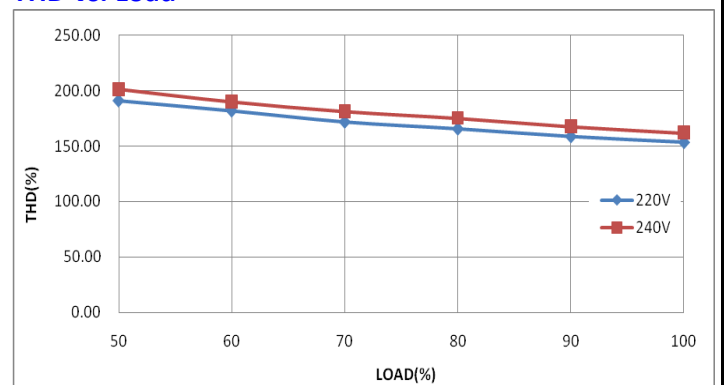
Efficiency vs. Load



Power Factor Characteristics



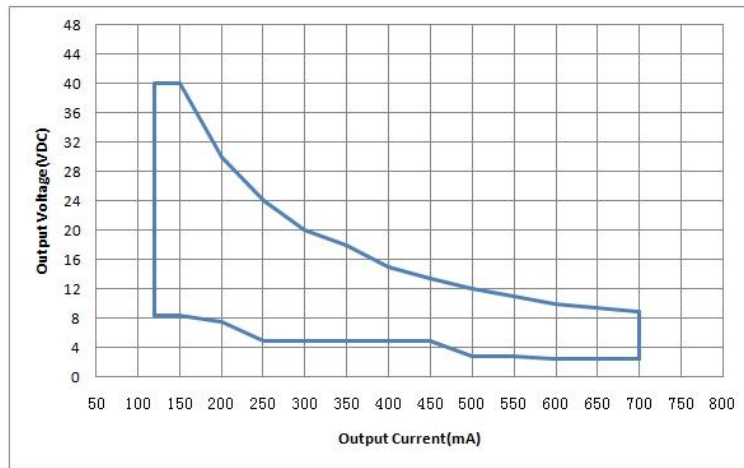
THD vs. Load



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■ Operating window



— Operating window 100%