

FEATURES

- Adaptive 100/120Hz current ripple remover
- Input voltage range 5V~60V
- Built-in 60V power MOSFET
- LED voltage low to 0.4V when LED current is 0.7A
- Programmable LED current ripple
- Programmable maximum LED cathode voltage
- Internal LED voltage limit
- Internal LED current limit
- Short/Open protection
- Hot plug protection
- Over temperature protection
- TO252-5L package

APPLICATIONS

- LED Lighting

DESCRIPTION

EV1232 is used to remove the 100/120Hz current ripple on AC/DC power by a capacitor between VC and GND.

If the voltage on LED pin exceeds 6V, the current ripple removing function is disabled, which could help limit the power dissipation on chip. JW1232 provides short protection, open protection and HOT-PLUG protection.

The maximum LED current is internally limited at 1.6A.

JW1232 provides over thermal protection. When the OTP is triggered, the internal MOSFET shuts down until the temperature decreases to 120°C.

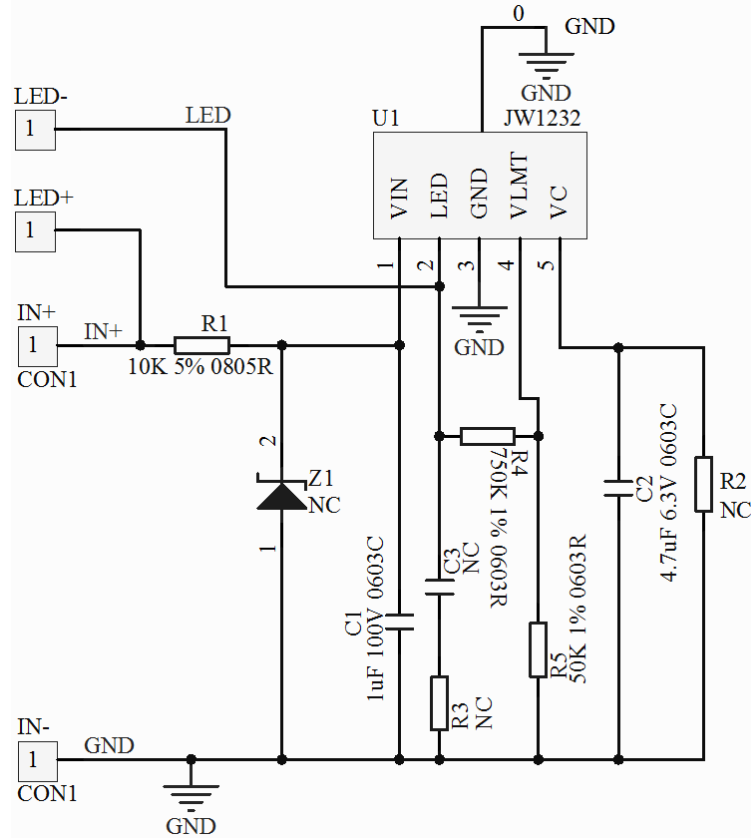
ELECTRICAL SPECIFICATIONS

Parameter	Symbol	Value	Unit
Output voltage	VOUT	35~45	V
Output current	IOUT	0~0.8	A

TYPICAL APPLICATION

SCHEMATIC

1. SCH-1#



BILL OF MATERIALS

Qty	Designator	Value	Description	Package	Manufacturer	Manufacturer P/N
1	U1	JW1232	IC	TO252-5L		
1	C1	1uF/100V	Capacitor	0805C		
1	C2	4.7uF/6.3V	Capacitor	0603C		
0	C3	NC	Capacitor	0603C		
0	Z1	NC(56V)	Zener	1206D		
1	R1	10K/5%	Resistor	0805R		
0	R2	NC	Resistor	0603R		
0	R3	NC	Resistor	0603R		
1	R4	750K/1%	Resistor	0805R		
1	R5	50K/1%	Resistor	0603R		

PRINTED CIRCUIT BOARD LAYOUT

Figure1—Top Layer

Figure2—Bottom Layer

Figure3—Top Silk Layer

QUICK START GUIDE

1. Connect the IN+ & IN- of the EVB to the output of the pre-driver and connect the positive terminal and negative terminal of the load to LED+&LED-, respectively.
2. Make sure the maximum output voltage of the pre-driver is less than 60V.
3. The load must be LEDs when you test the characteristics of the EVB.
4. Turn on the power supply of the pre-driver, the evaluation board starts operating in normal condition.
5. The output current ripple is adjustable by varying the C3 on the evaluation board.
6. The resistor R2 connected between VLMT and GND can set the limit value of LED voltage.
7. For more information, please refer to the datasheet of JW1232.

TYPICAL PERFORMANCE CHARACTERISTICS

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