

## DESCRIPTION

The MT7932 is a single-stage, primary side control AC-DC LED driver with active power factor correction. The MT7932 integrates on-chip PFC circuit operates in discontinuous conduction mode (DCM) to achieve high power factor and low harmonic distortion (THD). With MAXIC Proprietary control technique, precision LED current is achieved without secondary side sense and feedback circuit including opto-coupler.

The MT7932 provides various protections, such as over current protection (OCP), over voltage protection (OVP), short circuit protection (SCP) and over temperature protection (OTP), etc, to improve system reliability.

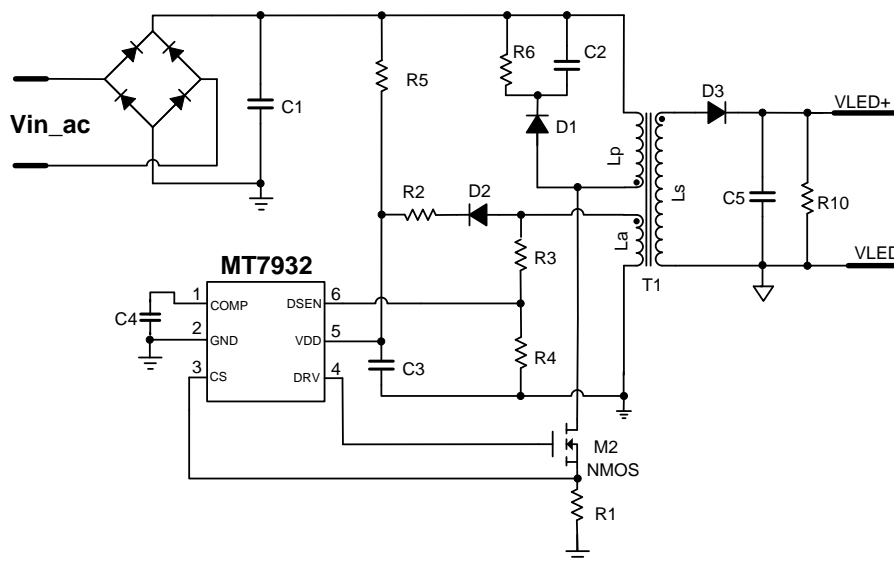
## FEATURES

- Single-stage Active PFC for high power factor and low THD (<8%)
- Primary side control eliminates opto-coupler
- High precision LED current ( $\pm 3\%$ )
- Up to 60W driving capability.
- Cycle-by-cycle current limiting
- Under-voltage lockout (UVLO) protection
- VDD and output over voltage protection
- Adjustable constant current and output power setting
- Power on soft-start
- Available in SOT23-6 package

## APPLICATIONS

- AC/DC LED driver applications
- Signal and decorative LED lighting
- E27/PAR30/PAR38/GU10 LED lamp
- T8/T10 LED String

## Typical Application Circuit



### ABSOLUTE MAXIMUM RATINGS

VDD Voltage	-0.3V to VDD Clamp
DRV Pin Voltage	-0.3V to 25V
COMP/CS/DSEN Pins Voltage	-0.3V to 5V
Power Dissipation ( TA=25°C, SOT23-6)	0.6W
Lead Temperature (soldering, 10 sec.)	260°C
Storage Temperature	-55°C to 150°C
Junction Temperature Tj	150°C

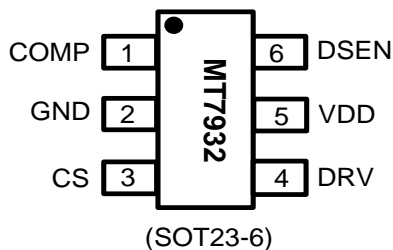
### Recommended operating conditions

Supply voltage	7.2V to 22V
Operating Temperature	-40°C to 125°C

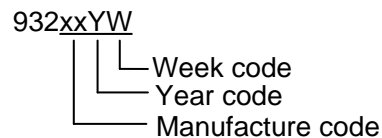
### Thermal resistance<sup>①</sup>

Junction to ambient (R <sub>θJA</sub> )	145°C/W
Junction to Case (R <sub>θJC</sub> )	80°C/W

### PIN CONFIGURATIONS



### Chip Mark



### PIN DESCRIPTION

Name	Pin No.	Description
COMP	1	Internal EA's output. Connect a capacitor to ground for frequency compensation.
GND	2	Ground.
CS	3	Current Sense Pin.
DRV	4	Gate drive output for primary MOSFET.
VDD	5	Power Supply.
DSEN	6	The voltage feedback from auxiliary winding. Connected to a resistor divider from auxiliary winding to sense output voltage.