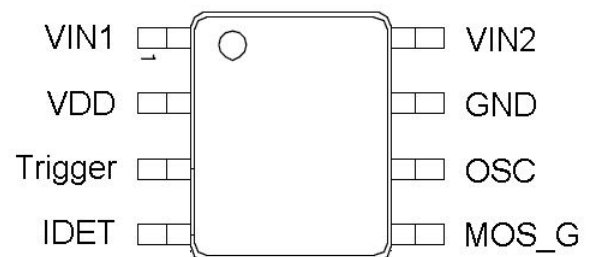

STL004A High-Brightness LED driver

Features

- Use for High-brightness LED string
- Supply voltage input range from 8V to 400V
- More than 90% efficiency
- Constant current control for LED
- Adjustable LED drive current by an external resistor
- Built-in voltage regulator
- PWM duty cycle auto-adjustable by current detection
- Dimming function by adjusting external VR
- Temperature compensation of I_{LED} current
- Voltage regulator with external resistor for low temperature



Applications

- AC to DC LED driver applications
- DC to DC LED driver applications
- Back Lighting of flat panel displays
- Automotive Lighting
- Switching Power supply

General Description

STL004A is a High-Brightness LED driver ASIC. It provides a simple way to control multiple pieces of LED string under wide range of AC or DC input voltage. Constant current control could extend the LED life-cycle and apply to any type of LED intelligently.

Built-in voltage regulator provides a steady operating voltage environment for STL004A. Very wide range of input voltage even up to 400V could be regulated.

Pin Assignment

Pin Name	Pin # SOP-8	I/O	Description
VIN1	1	IN	Voltage regulator input with external resistor
VDD	2	P	Power input
Trigger	3	IN	Level trigger to enable PWM operation
IDET	4	IN	LED current detection
MOS_G	5	OUT	POWER MOSFET Gate control
OSC	6	IN	Oscillation frequency control with capacitor
GND	7	P	Power ground
VIN2	8	IN	Voltage regulator input with internal resistor

Typical Applications

