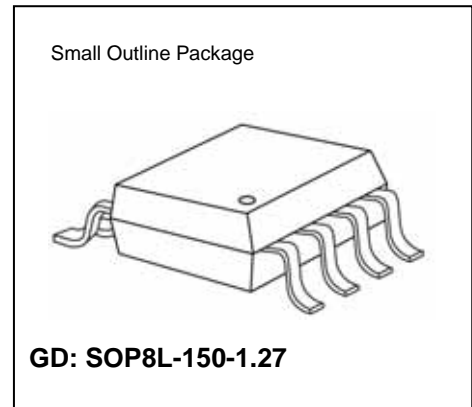




All-Ways-On™ High-Power LED Driver

Features

- 2 constant-current output channels
- Constant output current invariant to load voltage change
- Maximum output constant current per channel: 360 mA
- Thermal protection and flag
- Output current adjusted through an external resistor
- Schmitt trigger input
- 5V supply voltage
- Package type: "Pb-free & Green" package with thermal pad



Current Accuracy		Conditions
Between Channels	Between ICs	
< ±3%	< ±6%	I _{OUT} = 40mA ~ 360 mA @ V _{DS} = 0.6V

Product Description

MBI1802 is an instant On/Off LED driver for high power LED applications and exploits PrecisionDrive™ and All-Ways-On™ technology to enhance its output characteristics.

With All-Ways-On™, MBI1802 provides users with 2-channel constant current ports. Users may adjust the output current up to 360 mA through an external resistor, R_{ext}, which gives users flexibility in controlling the light intensity of LEDs. Also, users can precisely adjust LED brightness from 0% to 100% via output control with Pulse Width Modulation. Alternatively, MBI1802 provides one-step current adjustment to make 25% of the output current via enabling the quarter pin (\overline{QT}) as "Low".

Additionally, to ensure the system reliability, MBI1802 is built with Thermal Protection (TP) function and thermal pad. The TP function protects IC from over temperature (165°C). Also, the thermal pad enhances the power dissipation. As a result, a large amount of current can be sunk safely in one package.

Applications

- High-flux LED lighting
- Automotive interior lighting