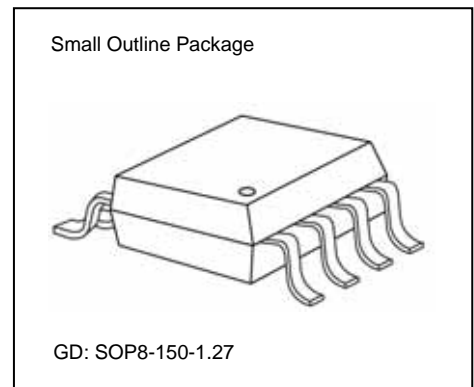




All-Ways-On™ High-Power LED Driver

Features

- 12V supply voltage
- 2 constant-current output channels
- Constant output current invariant to load voltage change
- Maximum output constant current per channel: 360 mA
- Thermal protection
- Individual output current adjusted through external resistors
- 25% and 50% of pre-set current adjustment via \overline{OEn} level setting
- Package type: "Pb-free & Green" package with thermal pad



Current Accuracy		Conditions
Between Channels	Between ICs	
< ±5%	< ±6%	$I_{OUTn} = 40mA \sim 360 mA$ @ $V_{DS} = 1V$

Product Description

MBI1812 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™, MBI1812 provides users with 2-channel constant current ports. Users may adjust the individual output current up to 360 mA through external resistors, R_{ext0} and R_{ext1} , which give 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, MBI1812 provides additional two-step current adjustment to make 25% and 50% of the output current via controlling pins, $\overline{OE0}$ and $\overline{OE1}$, to appropriate level.

Additionally, to ensure the system reliability, MBI1812 is built with thermal protection function and thermal pad. When junction temperature reaches 160°C, the output ports will be disabled to protect IC from thermal damage. The output will be activated again once the junction temperature cools down to 130°C. Also, the thermal pad enhances the power dissipation and a large amount of current can be sunk safely with the package.

Applications

- High-flux LED lighting