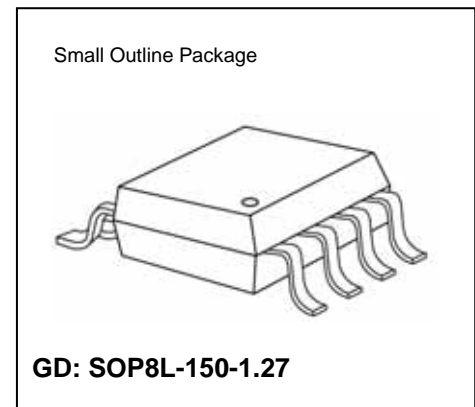




All-Ways-On™ High-Power LED Driver

Features

- 4 constant-current output channels
- Constant output current invariant to load voltage change
- Maximum output constant current per channel: 240mA
- Excellent output current accuracy:
between channels: $<\pm 3\%$ (max.), and
between ICs: $<\pm 6\%$ (max.)
- Output current adjusted through an external resistor
- Schmitt trigger input
- 5V supply voltage
- Package type: "Pb-free & Green" SOP8 with thermal pad



Current Accuracy		Conditions
Between Channels	Between ICs	
$< \pm 3\%$	$< \pm 6\%$	$I_{OUT} = 40 \sim 240 \text{ mA}$

Product Description

MBI1804 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. At MBI1804 output stage, four regulated current ports are designed to provide uniform and constant current sinks for driving LEDs within a large range of V_F variations.

With All-Ways-On™, MBI1804 provides users 4-channel constant current ports. Users may adjust the output current from 40 mA up to 240mA through an external resistor, R_{ext} , which gives users flexibility in controlling the light intensity of LEDs. In addition, users can precisely adjust LED brightness from 0% to 100% via output enable (\overline{OE}) with Pulse Width Modulation.

Additionally, to ensure the system reliability, MBI1804 is built with TP (Thermal Protection) 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 handled safely in one package.