

**All-Ways-On™ High-Power LED Driver**

Features

- Constant output current invariant to supply and load voltage change
- Maximum output constant current: 1.2A
- Output current adjusted through an external resistor
- Built-in thermal protection
- 5V supply voltage
- Package type: "Pb-free" package

Surface Mount Device

GSD: TO-265 5L

Product Description

MBI1801 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 MBI1801 output stage, one regulated current port is designed to provide a uniform and constant current sink for driving LEDs within a large range of V_F variations.

With All-Ways-On™, MBI1801 easily provides users a consistent current source. Users may adjust the output current from 50 mA up to 1.2A 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. MBI1801 also guarantees that LEDs can be cascaded to maximum 17V at the output port.

Additionally, to ensure the system reliability, MBI1801 is built with Thermal Protection (TP) function. The TP function protects IC from over temperature (165°C). Also, the TO package enhances the power dissipation. As a result, a large amount of current can be sunk safely in one package.