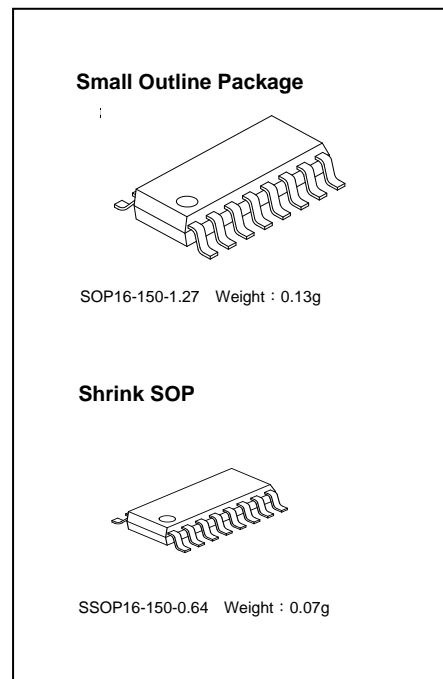




8-Channel Constant Current LED Sink Driver

Features

- 8 constant-current output channels
- Constant output current invariant to load voltage change:
Constant output current range per channel:
3 - 45mA @ $V_{DD}= 5V$;
3 - 30mA @ $V_{DD}= 3.3V$
- Excellent output current accuracy:
between channels: $\pm 3\%$ (max.), and
between ICs: $\pm 6\%$ (max.)
- Output current adjusted through an external resistor
- Staggered output delay
- 25MHz clock frequency
- Schmitt trigger input
- 3.3V/ 5V supply voltage
- "Pb-free & Green" Package



Current Accuracy		Conditions
Between Channels	Between ICs	
< $\pm 3\%$	< $\pm 6\%$	$I_{OUT}= 3mA \sim 30mA @ V_{DS} \geq 0.8V; V_{DD}= 3.3V$ $I_{OUT}= 3mA \sim 45mA @ V_{DS} \geq 0.8V; V_{DD}= 5.0V$

Product Description

With PrecisionDrive™ technology, MBI5167 is designed for LED displays which require to be operated at low current and to match the luminous intensity of each channel. It provides supply voltage and accepts CMOS logic input at 3.3V and 5.0V to meet the trend of low power consumption. MBI5167 contains a serial buffer and data latches which convert serial input data into parallel output format. At MBI5167 output stage, sixteen regulated current ports are designed to provide uniform and constant current sinks for driving LEDs within a large range of V_F variations.

MBI5167 provides users with great flexibility and device performance for LED display applications, e.g. LED panels. It accepts an input voltage range from 3V to 5.5V and maintains a constant current up from 3mA to 45mA determined by an external resistor, R_{ext} , which gives users flexibility in controlling the light intensity of LEDs. MBI5167 guarantees to endure maximum 17V at the output port. The high clock frequency, 25MHz, also satisfies the system requirements of high volume data transmission.