



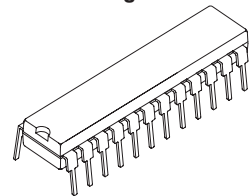
# 16-bit Constant Current LED Sink Driver

## Features

- 16 constant-current output channels
- Constant output current invariant to load voltage change
- Excellent output current accuracy:  
between channels:  $<\pm 3\%$  (max.), and  
between ICs:  $<\pm 6\%$  (max.)
- Output current adjusted through an external resistor
- Constant output current range: 5-90 mA
- Fast response of output current,  $\overline{OE}$  (min.): 200 ns
- 25MHz clock frequency
- Schmitt trigger input
- 5V supply voltage
- Optional for RoHS-Compliant Packages

Current Accuracy		Conditions
Between Channels	Between ICs	
$< \pm 3\%$	$< \pm 6\%$	$I_{OUT} = 10 \sim 60 \text{ mA}$

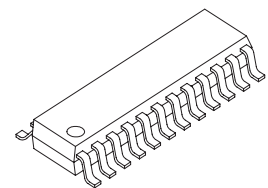
### Dual In-Line Package



GN: P-DIP24-300-2.54

GNS: SP-DIP24-300-1.78

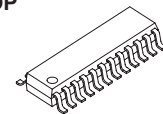
### Small Outline Package



GD: SOP24-300-1.27

GF: SOP24-236-1.00

### Shrink SOP



GP: SSOP24-150-0.64

GPA: SSOP24-150-0.64

## Product Description

MBI5026 is designed for LED displays. As an enhancement of its predecessor, MBI5016, MBI5026 exploits PrecisionDrive™ technology to enhance its output characteristics. MBI5026 contains a serial buffer and data latches which convert serial input data into parallel output format. At MBI5026 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.

MBI5026 provides users with great flexibility and device performance while using MBI5026 in their system design for LED display applications, e.g. LED panels. Users may adjust the output current from 5 mA to 90 mA through an external resistor,  $R_{ext}$ , which gives users flexibility in controlling the light intensity of LEDs. MBI5026 guarantees to endure maximum 17V at the output port. The high clock frequency, 25 MHz, also satisfies the system requirements of high volume data transmission.