

250-up price
TPS61043DRBT
€ 1.10

TPS61043 Constant Current Led Driver

from Texas Instruments

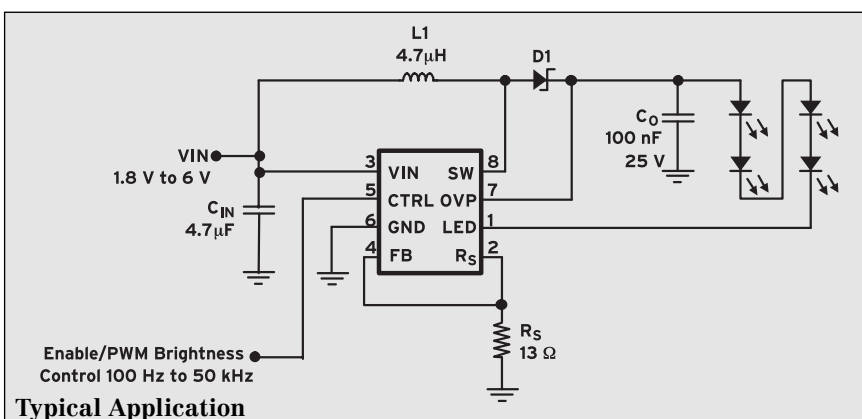
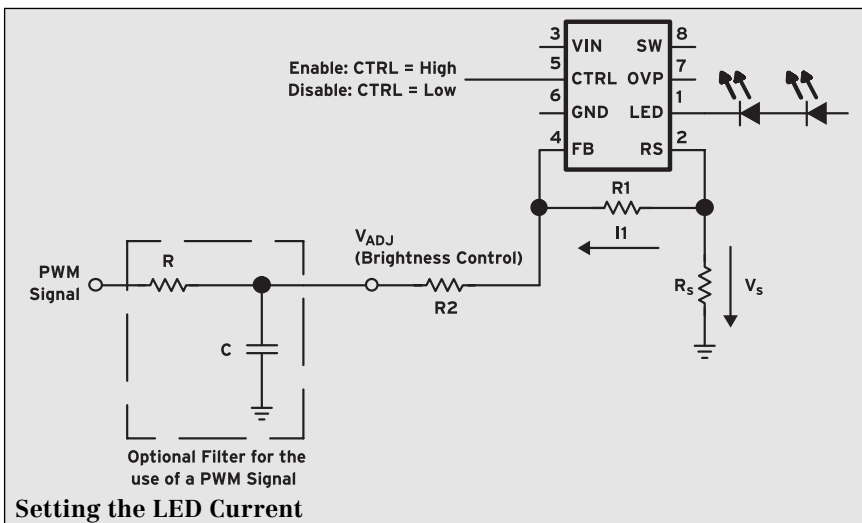
This device expands the family of DC/DC converters with a new constant current LED driver. The TPS61043 is a high-frequency boost converter with a constant current output; the current is set with the external sense resistor and is directly regulated by the feedback pin. In addition, the customer can control the LED brightness using a

PWM signal with a frequency range of 100 Hz...50 kHz applied to the control pin CTRL. For higher flexibility, the device can be configured to control the brightness of the LED with an analog signal. A second function, available via the control pin CTRL, can disable the device and disconnect the LEDs from the ground during shutdown. For maximum

safety during operation, the output has an integrated overvoltage protection limited typically at 18 V. The TPS61043 provides a solution for applications where higher LED currents or more than four LEDs in series need to be powered.

Features

- Current source with 18 V overvoltage protection
- Powers up to 4 LEDs in series
- Input voltage range: 1.8...6.0 V
- Up to 85% efficiency
- Switching frequency: up to 1 MHz
- Internal power Mosfet switch: 400 mA typ.
- Shutdown current: 0.1 μ A typ.
- Ambient operating temperature: -40...+85 °C
- Small 3 x 3 mm QFN package



Typical Applications

White or similar LED supply for display backlight/sidelight in

- PDAs, pocket PCs, smart phones
- Handheld devices
- Medical equipment
- Industrial terminals
- Dashboards

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