

Small Package, High Performance, Asynchronous Boost For 10 WLED Driver ME2212

General Description:

The **ME2212** is a high frequency, asynchronous boost converter. The internal MOSFET can support up to 10 White LEDs for backlighting and OLED power application, and the internal soft start function can reduce the inrush current. The device operates with 1-MHz fixed switching frequency to allow small external components and to simplify possible EMI problems. Moreover, the IC comes with 46V over voltage protection to allow inexpensive and small-output capacitors with lower voltage ratings. The LED current is initially set with the external sense resistor R_s .

Features:

- VIN Operating Range : 2.5V to 5.5V
- Internal Power N-MOSFET Switch
- Wide Range for PWM Dimming (100Hz to 200kHz)
- 1MHz Switching Frequency
- Minimize the External Component Counts
- Internal Soft Start
- Internal Compensation
- Under Voltage Protection
- Over Voltage Protection
- Over Temperature Protection

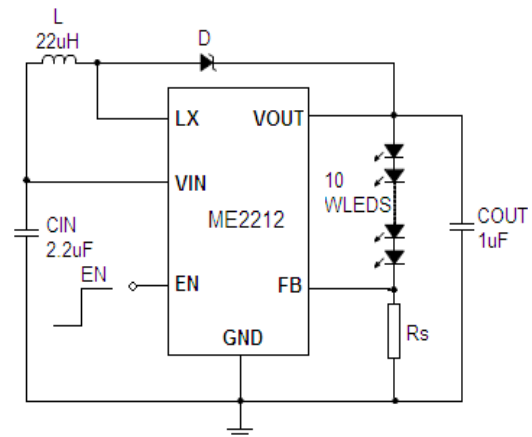
Applications:

- Cellular Phones
- Digital still cameras
- PDAs and Smart Phones and MP3 and OLED.
- Probable Instruments

R_s Resistor Value Selection:

| TYP. (Ω) | I_{LED} (mA) |
|-------------------|----------------|
| 10 | 20 |

Typical Application:



$I_{LED} = 20\text{mA}$, $R_s = 10\Omega$