

Battery Powered, High Efficiency Synchronous DC/DC Boost Converter

General Description

AS6301 designed with high efficiency step up DC/DC converter for portable devices applications. It features with extreme low 26 μ A quiescent current with no load which is the best fit for extending battery life during the standby mode.

The start-up voltage is 0.93V typically with operating voltage down to 0.7V. With Synchronous structure, it does not need any external Schottky diode. The peak current is limited to 1A for quick turn on.

This product can provide 500mA load current and still maintained at least 70% efficiency and above 90% efficiency when at 100mA load current.

The AS6301 is available in SOT25 package, With RoHS compliance.

Typical Application

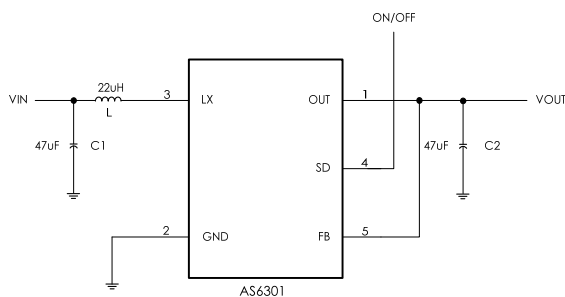


Fig. 1

Features

- Single or dual battery operation
- Achieve 93% efficiency
- Output Current up to 500mA
- Reference voltage 1.195V
- Typical Iq 26 μ A with no load
- No Schottky diode needed
- Shutdown current < 1 μ A
- Excellent Line and Load Transient Response

Applications

- Blue-Tooth devices
- Cellular and Smart Phones
- Personal multi-media Player (PMP)
- Wireless networking
- Hand-Held Devices with 1 to 3-Cell of NiMH/NiCd Batteries
- Digital Still Cameras
- Portable applications

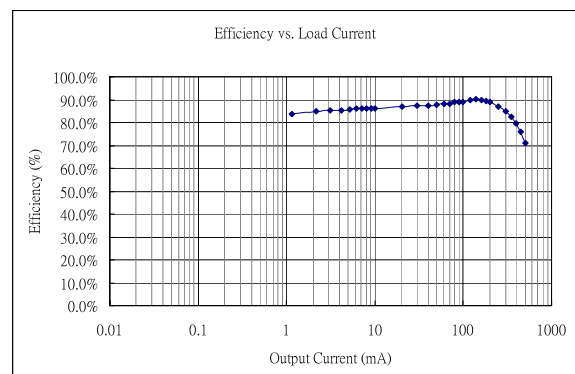


Fig. 2

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