

■ GENERAL DESCRIPTION

The AS5754B is a single cell, constant current (CC)/constant voltage(CV) charger for Li-Ion batteries. No external sense resistor or no blocking diode is required due to AS5754B internal MOSFET architecture. Thermal feedback regulates the charge current to limit the die temperature during high power operation or high ambient temperature.

The AS5754B charge voltage is fixed at 4.2V. The charge current can be programmed externally with a single resistor. The AS5754B automatically terminates the charge cycle when the charge current drops to 1/10th the programmed value after the final float voltage is reached.

When the input supply is removed, the AS5754B automatically enters a low current state, dropping the battery drain current to less than 2uA. The AS5754B can be put into shutdown mode, reducing the supply current to 25uA. Other features include charge current monitor, under voltage lockout, automatic recharge and a status pin to indicate charge termination and the presence of an input voltage.

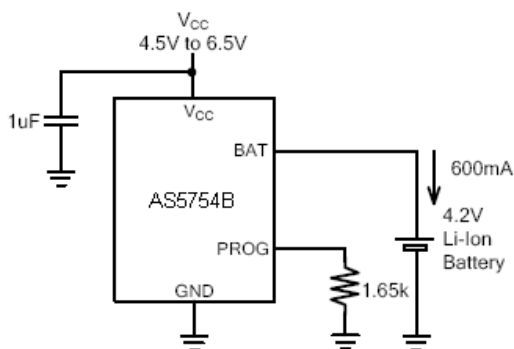
■ FEATURES

- ◆ Programmable charge current Up to 800mA
- ◆ No MOSFET, Sense resistor or Blocking Diode required
- ◆ Preset 4.2V charge voltage with $\pm 1\%$ accuracy
- ◆ Charge current monitor output for Gas Gauging
- ◆ Thermal Regulation Maximizes Charge Rate without risk of overheating
- ◆ Over Voltage Protect
- ◆ Automatic Recharge
- ◆ Charge Status Output pin
- ◆ C/10 charge Termination
- ◆ 25uA Supply Current in Shutdown
- ◆ 2.9V Trickle Charge Threshold
- ◆ Soft-start Limits Inrush Current
- ◆ Charge Single Cell Li-Ion Batteries Directly from USB Port

■ APPLICATION

- ◆ Charging Docks and Cradles
- ◆ Cellular and smart phone
- ◆ PMP and MP3/MP4/MP5
- ◆ Blue Tooth Applications
- ◆ Portable application

■ TYPICAL APPLICATION



PACKAGE CONFIGURATION

