



### Features

- Wide Input Voltage: 4.5V ~ 12V
- Programmable Charge Current Up to 600mA
- No MOSFET, Sense Resistor or Blocking Diode Required
- Constant-Current/Constant-Voltage Operation with Thermal Regulation to Maximize Charge Rate
- Without Risk of Overheating
- Charges Single Cell Li-Ion Batteries Directly from USB Port
- Preset 4.2V Charge Voltage with 1% Accuracy
- Automatic Recharge
- 2.9V Trickle Charge Threshold
- Available in 6-Lead SOT-23 Package

### Applications

- Charger for Li-Ion Coin Cell Batteries
- Portable MP3 Players, Wireless Headsets
- Bluetooth Applications
- Multifunction Wristwatches

### Description

The HX6007 is a complete constant current/constant voltage linear charger for single cell lithium-ion batteries. Its package and low external component count make the HX6007 ideally suited for portable applications. Furthermore, the HX6007 is specifically designed to work within USB power specifications.

No external sense resistor is needed, and no blocking diode is required due to the internal MOSFET architecture. The charge voltage is fixed at 4.2V, and the charge current can be programmed externally with a single resistor. The HX6007 automatically terminates the charge cycle when the charge current drops to 1/10<sup>th</sup> the programmed value after the final float voltage is reached.

The HX6007 converters are available in the industry standard SOT-23-6L power packages (or upon request).

### Order Information

HX6007 - ① ② :

SYMBOL	DESCRIPTION
①	Denotes Output Voltage: N: 4.2V
②	Denotes Package Types: E: SOT-23-6L