

UCC3952A-4, Single Cell Lithium-Ion Battery Protection IC W/Internal FET And Vov = 4.35V, BCC Package

**DEVICE STATUS: ACTIVE** 

PARAMETER NAME:	UCC3952A-4
Cells Protected (max)	1
Overvoltage Threshold (V)	4.35
Protection FETs	Internal
Overcurrent Protection	Yes
Overcurrent Delay	Yes
Serial Bus	No
Shutdown Current (uA)	2.5
Target	Wireless phone, pager, PDA, consumer electronics

## **FEATURES:**

- Protects Sensitive Lithium-Ion Cells From Overcharging and Over-Discharging
- Dedicated for One-Cell Applications
- Integrated Low-Impedance MOSFET Switch and Sense Resistor
- Precision Trimmed Overcharge and Overdischarge Voltage Limits
- Extremely Low Power Drain
- 3.5-A Current Capacity
- Overcurrent and Short-Circuit Protection
- Reverse Charger Protection
- Thermal Protection

## **DESCRIPTION:**

The UCC3952A is a monolithic BiCMOS lithium-ion battery protection circuit designed to enhance the useful operating life of a one-cell rechargeable battery pack. Cell protection features include internally trimmed charge and discharge voltage limits, discharge current limit with a delayed shutdown, and an ultra-low-current sleep mode state when the cell is discharged. Additional features include an on-chip MOSFET for reduced external component count and a charge pump for reduced power losses while charging or discharging a low-cell-voltage battery pack. This protection circuit requires one external capacitor and can operate and safely shut down in a short circuit condition.