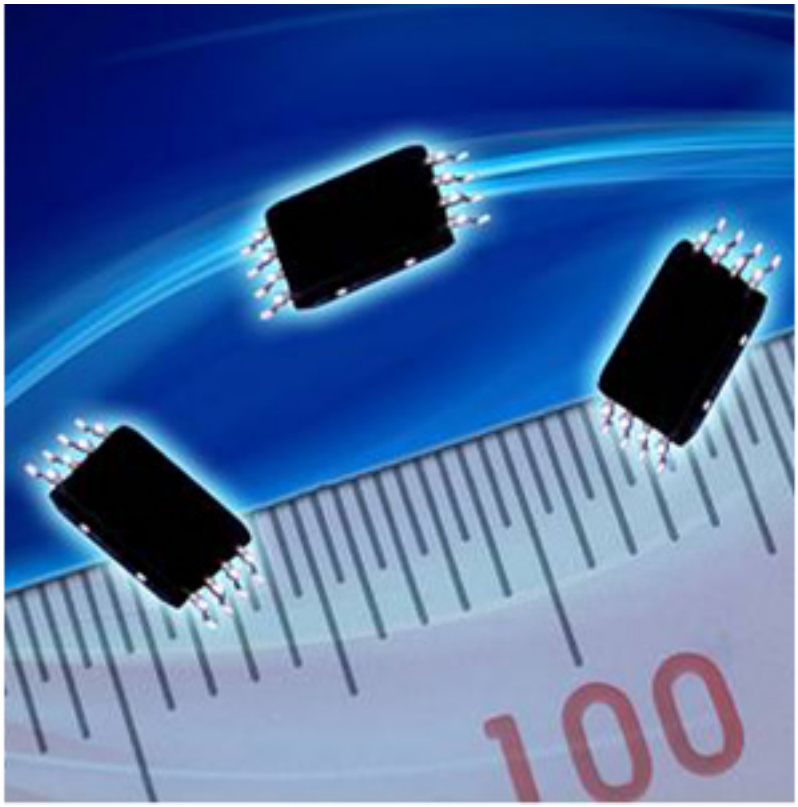
ICs provide overcharge and overdischarge protection of Lithium-Ion rechargeable cells



The S-8225A/B series is used to provide overcharge and overdischarge protection of Lithium-Ion rechargeable cells. It includes high-accuracy voltage detectors with delay times to monitor the status of 3-cells to 5-cells by switching voltage level of SEL1 and SEL2 pins. The S-8225A series is able to provide protection to 6-cells or more by cascade connection. The high accuracy detection (+20mV @ 25C) and low current consumption (22uA max.) makes it ideal for power sensitive applications.

Features

• High-accuracy voltage detection function for each cell
• Overcharge detection voltage n (n = 1 to 5) 3.5 V to 4.4 V (50 mV step)
• Accuracy ±20 mV (Ta = +25°C), ±30 mV (Ta = 0°C to +60°C)
• S-8225A - Overdischarge detection voltage 2.0 V to 3.2 V (100 mV step) with ±80 mV Accuracy
• S-8225B - Overdischarge detection voltage 2.2 V to 3.2 V (100 mV step) with ±80 mV Accuracy
• Overcharge detection delay time and overdischarge detection delay time can be set by external capacitor.
• Switchable between 3-serial to 5-serial cell combinations
• Cascade connection is available – S-8225A
• High-withstand voltage element Absolute maximum rating: 28 V
• Wide operation voltage range 4 V to 26 V
• Wide operation temperature range Ta = −40°C to +85°C

• Halogen-free

Applications
- Lithium-Ion Battery Packs
- Power Tools
- Electric Vehicles

Package
- 16-pin TSSOP

Pricing: $1.69 at 10,000 pieces

www.sii-crystals.com [1]

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[1] http://www.sii-crystals.com