

Product Preview

Lithium Battery Protection Circuit for Three or Four Cell Battery Packs

The MC33346 is a monolithic lithium battery protection circuit that is designed to enhance the useful operating life of three or four cell rechargeable battery packs. Cell protection features consist of independently programmable charge and discharge limits for both voltage and current with a delayed current shutdown, cell voltage balancing with on-chip balancing resistors, and virtually zero current sleepmode state when the cells are discharged. Additional features consists of a six wire microcontroller interface bus that can selectively provide a pulse output that represents the internal reference voltage, cell voltage, cell current and temperature, as well as control the states of four internal balancing and two external MOSFET switches. A microcontroller time reference output is available for gas gauge implementation. This protection circuit requires a minimum number of external components and is targeted for inclusion within the battery pack. The MC33346 is available in standard and low profile 24 lead surface mount packages.

DW SUFFIX CASE 751E (SO-24L)

- Independently Programmable Charge and Discharge Limits for Both Voltage and Current
- Delayed Current Shutdown
- Cell Voltage Balancing with On-Chip Resistors
- Six Wire Microcontroller Interface Bus
- Data Output for Reference, Voltage, Current, and Temperature
- Microcontroller Time Reference Output for Gas Gauging
- Virtually Zero Current Sleepmode State when Cells are Discharged
- Programmable for Three or Four Cell Applications
- Minimum External Components for Inclusion within the Battery Pack
- Available in Low Profile Surface Mount Packages

ORDERING	INFORMATION
ORDERING	INFURIMATION

Device	Operating Temperature Range	Package
MC33346DW	T _A = -40° to +85°C	SO–24L
MC33346DTB	$1A = -40^{\circ} 10 + 85^{\circ} C$	TSSOP-24



This device contains 4760 active transistors.

MC33346

LITHIUM BATTERY **PROTECTION CIRCUIT** FOR THREE OR FOUR CELL SMART BATTERY PACKS



MC33346

OUTLINE DIMENSIONS



MC33346

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