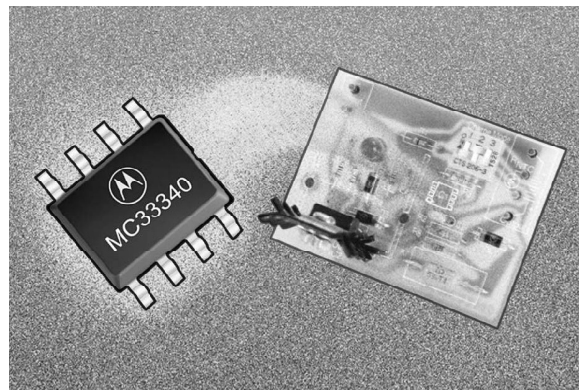


Information Brief



MC33340 Series Battery Fast Charge Controller Simplifies NiCd and NiMH Charging

The MC33340 is specifically designed for fast charging of Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) batteries using negative slope voltage detection. Accurate charge termination is ensured by an output that momentarily interrupts the charge current for precise voltage sampling. The IC also supports secondary backup termination methods of either programmable time or temperature limits. Protective features include battery over and undervoltage detection, latched over temperature detection, and power supply input undervoltage lockout. A rapid test mode enhances end product testing.

FEATURES

- Negative slope voltage detection with 4.0 mV sensitivity
- Accurate zero current battery voltage sensing
- High noise immunity with synchronous VFC /Logic
- Programmable one to four hour fast charge time limit
- Programmable over / under temperature detection
- Battery over and undervoltage fast charge protection
- Rapid system test mode
- Power supply input undervoltage lockout with hysteresis
- Supply voltage range of 3.0V to 18V

TYPES OF APPLICATIONS

- Battery-powered equipment
- Portable computing systems
- Handheld communication devices
- NiCd and NiMH battery chargers
- Fast charger for power tools

BENEFITS TO YOU

- Maximizes battery life by preventing over charging of cells.
- Reduced charging time because batteries are charged very quickly with a negative delta charge termination method.
- End user safety is ensured with the protective backup features in the IC.
- Fast and simplified charger manufacturing and testing with rapid system test mode.
- Design versatility with wide power supply voltage range of 3.0 to 18 V.
- Extends operating temperature range of your product with operation from -25 to +85°C.

A SOLUTION FOR THESE QUESTIONS

- Do you want to extend battery life by preventing overcharging of cells?
- Do you need battery charging protective features to enhance charger safety?
- Do you need a wide power supply voltage range?
- Do you want to reduce the charging time of your NiCd or NiMH batteries?
- Do you need programmable fast charge time limit capabilities?
- Do you need backup charge termination methods for added charging safety?
- Do you want to reduce the manufacturing / test time of your battery charger with an automatic fast test mode?
- Do you need a charge controller that can operate with a supply voltage as low as 3.0 V, or as high as 18 V?

LITERATURE

A data sheet containing full specifications, parametric curves and extensive applications information is available through our Literature Distribution Center, please call 1-800-441-2447.

ORDERING INFORMATION

Device	Operating Temperature Range	Package
MC33340D	$T_A = -25^{\circ}\text{C}$ to $+85^{\circ}\text{C}$	SO-8
MC33340P		DIP-8

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