

MM3513 Series

2023/07/20

Outline

The MM3513 series are voltage monitor ICs for rechargeable Lithium-ion or Lithium-polymer batteries, using a high voltage CMOS process. Each Lithium-ion or Lithium-polymer battery can be balanced. Each of these ICs is composed of voltage detectors, reference voltage sources, an oscillator, a counter circuit and logical circuits.

Product Series

Cell-balance control

Features

1) High-accuracy detection voltage

- Detection voltage 3.5V to 4.5V, 5mV steps Accuracy $\pm 20\text{mV}$
 - Hysteresis voltage 0V to 0.4V, 50mV steps
- However, "Detection voltage-Hysteresis voltage < 3.5V" is disabled.

2) Range of Detection delay time

- Detection delay time Selectable from 0.25s, 1.0s, 1.2s, 3.0s, 4.5s

3) Low current consumption

- Normal mode Typ. $1.5\mu\text{A}$, Max. $3.0\mu\text{A}$
- Stand-by mode Max. $0.5\mu\text{A}$

Specifications

			Detection	Release	
--	--	--	-----------	---------	--

MM3513 Series

2023/07/20

Product name	Detection voltage [V]	Hysteresis voltage [V]	delay time [sec]	delay time [msec]	Package
MM3513A01NRH	4.150	0.010	0.25	8.0	SOT-25A
MM3513B01NRH	3.750	0.010	0.25	8.0	SOT-25A
MM3513C01NRH	4.200	0.010	0.25	8.0	SOT-25A
MM3513D01NRH	3.600	0.010	0.25	8.0	SOT-25A
MM3513E03NRH	4.350	0.380	3.00	8.0	SOT-25A
MM3513D02NRH	3.600	0.100	0.25	8.0	SOT-25A
MM3513F01NRH	3.650	0.010	0.25	8.0	SOT-25A
MM3513H01NRH	4.175	0.010	0.25	8.0	SOT-25A
MM3513J01NRH	3.475	0.010	0.25	8.0	SOT-25A
MM3513K01NRH	4.180	0.010	0.25	4000.0	SOT-25A
MM3513L01NRH	4.175	0.000	0.25	4000.0	SOT-25A
MM3513R01NRH	4.210	0.010	0.25	8.0	SOT-25A

Package

SOT-25A