2 cells lithium-ion/lithium-polymer battery Secondary protection IC
MM3480 Series

Outline

MM3480 series is a secondary protection IC for 2 serial cells lithium-ion / lithium-polymer rechargeable secondary battery, which detects battery voltage by cell.
With a timer circuit built-in, it is possible to set overcharge detection delay time.

Features (Unless otherwise specified, Topr=+25°C)

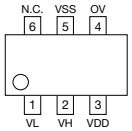
(1) Range and accuracy of detection voltage
- ●Overcharge detection voltage 4.0V to 4.5V, 5mV step Accuracy±30mV

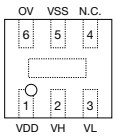
(2) Range of detection delay time
- ●Overcharge detection delay time 1.2s to 10.0s Selection from Rank

(3) Low current consumption
- ●Typ. 2.5μA, Max. 5.0μA (Vcell=3.5V)
- ●Typ. 0.1μA, Max. 0.15μA (Vcell=2.3V)

(4) Absolute maximum ratings
- ●VDD pin VSS−0.3V to +12V
- ●OV pin VSS−0.3V to VDD+0.3V
- ●Storage temperature −55 to +125°C
- ●Operation temperature −40 to +110°C

Pin Assignment

Top view SOT-26A	Pin No.	Function
	1	The input terminal of the positive voltage of VL cell and the negative voltage of VH cell.
	2	The input terminal of the positive voltage of VH cell.
	3	The input terminal of the power supply of IC.
	4	Output of over charge detection. (Output type is open drain type of N-ch FET)
	5	The input terminal of the ground of IC.
	6	Non connect

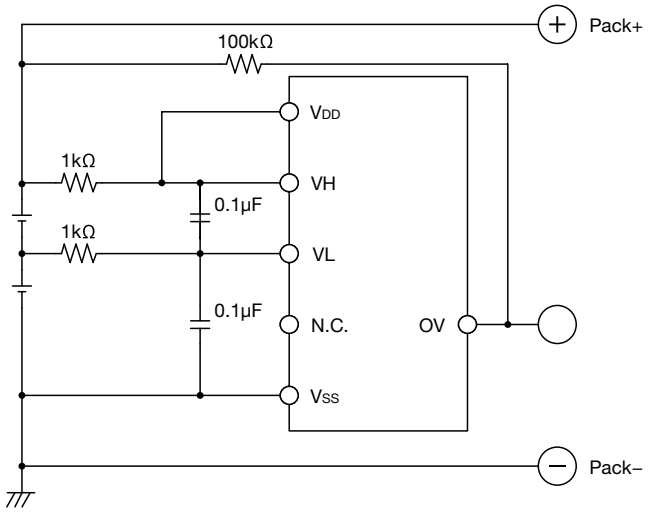
Top view SSON-6A	Pin No.	Function
	1	The input terminal of the power supply of IC.
	2	The input terminal of the positive voltage of VH cell.
	3	The input terminal of the positive voltage of VL cell, and the negative voltage of VH cell.
	4	Non connect
	5	The input terminal of the ground of IC.
	6	Output of over charge detection. (Output type is open drain type of N-ch FET)

Selection Guide (3000pcs/Reel)

Product name	Package	Function	Overcharge detection voltage [V]	Overcharge detection dead time [ms]	Output type
			V_{CELLU}	T_{OV}	
MM3480ANRE	SOT-26A	2 cells	4.220±0.030	10±3	N-Ch FET open drain Active High
MM3480ARRE	SSON-6A	2 cells	4.220±0.030	10±3	
MM3480BRRE	SSON-6A	2 cells	4.300±0.030	10±3	
MM3480CRRE	SSON-6A	2 cells	4.350±0.030	10±3	

Please inquire to us, if you request a rank other than the above.

Application Circuit



*Please there must be a possibility of the malfunction when there is a potential difference between VDD and VH, therefore between VDD and VH be short-circuited.

*The constant of the mark is a standard.