

Description

This is a battery protect solution IC which is integrated the protection IC developed for 1-cell series use in lithium ion/lithium polymer rechargeable batteries and dual common drain N-channel MOSFET. It functions to protect the battery by detecting overcharge, overdischarge, charge overcurrent, discharge overcurrent and turning off internal N-channel MOSFET.

Features

(1) **Protection IC and common drain N-ch MOSFET are integrated into one-packaging IC.**

(2) High-accuracy battery voltage detection.

- Overcharge detection voltage $4.225V \pm 25mV$
- Overdischarge detection voltage $2.8V \pm 50mV$
- Discharge overcurrent detection voltage $0.15V \pm 15mV$
- Charge overcurrent detection voltage $-0.15V \pm 30mV$
- Load short detection voltage $0.5V \pm 200mV$

(3) **Built-in timer circuit** (detection delay times)

- Overcharge detection delay time $1.2[+0.2, -0.24]s$
- Overdischarge detection delay time $75[+15, -14]ms$
- Discharge overcurrent detection delay time $9[+2, -1.8]ms$
- Charge overcurrent detection delay time $9[+2, -1.8]ms$
- Short detection delay time $300[\pm 60]\mu s$

(4) Maximum rated voltage.

- Charger side : 28v, Battery side : 12v

(5) Low current consumption.

- Power-down mode : 0.2uA max.(VDD=VM=1.5v)

(6) **Small 5mm×2mm×0.8mm 6-lead ESON package.**

Ordering Information

Type No.	Marking	Package Code
S6201	<u>6201</u>	ESON-6LD
	①	
	<u>□</u> <u>□□</u>	
	② ③	
	① Device Code ② Year Code ③ Week Code	

PIN Connection



Applications and Typical Circuit

- Lithium-ion rechargeable battery packs
- Lithium-polymer rechargeable battery packs

