

General 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 ± 30mV
- Overdischarge detection voltage 2.8V ± 70mV
- Discharge overcurrent detection voltage 0.15V ± 20mV
- Charge overcurrent detection voltage -0.15V ± 30mV
- Load short detection voltage 0.8V+200/-250mV

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

- Overcharge detection delay time 1.0[± 0.3]s (Ta=25°C)
- Overdischarge detection delay time 20[± 6]ms (Ta=25°C)
- Discharge overcurrent detection delay time 12[± 4]ms (Ta=25°C)
- Charge overcurrent detection delay time 8[± 3]ms (Ta=25°C)
- Short detection delay time 250[+175/-70]us (Ta=25°C)

(4) Maximum rated voltage.

- Charger side : 30v, Battery side : 12v

(5) Low current consumption.

- Standby mode : 0.1uA max.(VDD=2v)

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

Ordering Information

Type No.	Marking	Package Code
S6202	6202	ESON-6LD
	①	
	□ □ ② ③	
①Device Code ②Year Code ③Week Code		

PIN Connection



Applications and Typical Circuit

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

