

Li-Ion Battery Protector

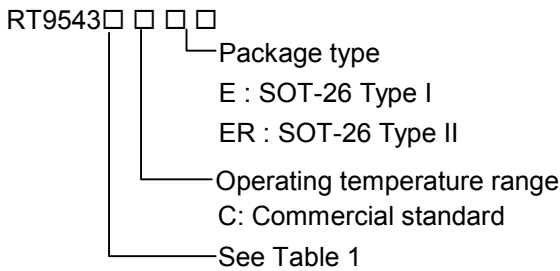
General Description

The RT9543 Series are protection ICs for over-charge/discharge of rechargeable one-cell Lithium-ion (Li+) batteries by CMOS process.

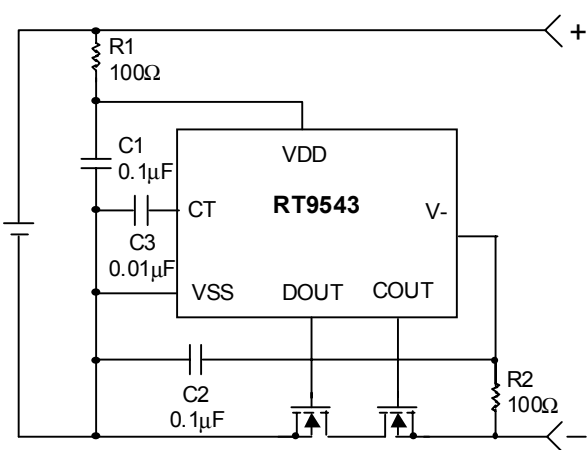
The RT9543 Series can detect over-charge/discharge of Li+ one-cell and excess load current and charge current, further include a short circuit protector for preventing large external short circuit current.

Each of these ICs is composed of four voltage detectors, a reference unit, a hysteresis circuit, and a bidirectional short circuit protector. Package of SOT-26 is available.

Ordering Information



Typical Application Circuit



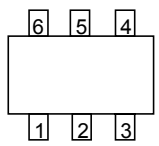
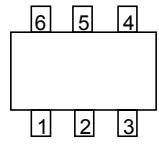
Features

- Sustaining to 24V Charger Voltage
- Low supply current
 - Supply current: TYP. 2.0μA
 - Standby current (after detecting over-discharge): Less than 0.2μA
- High accuracy detector threshold
 - Over-charge detector: ±50mV
 - Over-discharge detector: ±2.5%
- Built-in protection circuit
 - Excess current trip/Short circuit protector in discharging path
- Output delay of over-charge adjustable with an external capacitor: 75mS at 0.01μF
- Ultra small package: SOT26

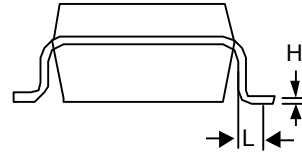
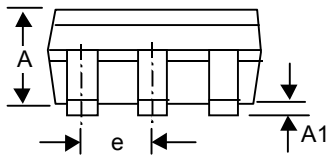
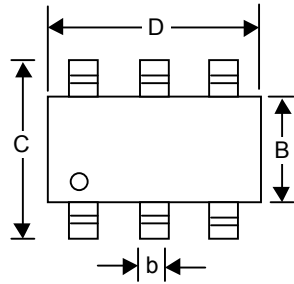
Applications

- Over-charge / Over-discharge Protection for Li+ One-cell Pack
- High Precision Protectors for Cellular Phones or Instruments Using Li+ One-cell Battery

Pin Configurations

Part Number	Pin Configurations
RT9543□CE (Plastic SOT-26)	TOP VIEW  <ol style="list-style-type: none"> 1. COUT 2. CT 3. VSS 4. DOUT 5. VDD 6. V-
RT9543□CER (Plastic SOT-26)	TOP VIEW  <ol style="list-style-type: none"> 1. DOUT 2. V- 3. COUT 4. CT 5. VDD 6. VSS

Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.889	1.295	0.035	0.051
A1	--	0.152	--	0.006
B	1.397	1.803	0.055	0.071
b	0.356	0.559	0.014	0.022
C	2.591	2.997	0.102	0.118
D	2.692	3.099	0.106	0.122
e	0.838	1.041	0.033	0.041
H	0.102	0.254	0.004	0.010
L	0.356	0.610	0.014	0.024

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