

# 300mA, Low Power Consumption, High Voltage CMOS LDO Regulator

## FEATURES

- Low Quiescent Current  $I_Q$ : 3 $\mu$ A (Typ.)
- 300mA Nominal Output Current
- Low Dropout Voltage
- Low Temperature Coefficient
- High Input Voltage (up to 45V)
- Output Voltage Accuracy:  $\pm 1\%/\pm 2\%$
- Fixed Output Voltage: 1.8V, 2.5V, 3.0V, 3.3V and 5.0V
- Current Limit Protection
- Over Temperature Protection
- SOT23-3, SOT23-5, SOT89-3L, SOT223 and SOP8 Packages

## APPLICATIONS

- Smart Power Network Equipment
- Portable Power Tools
- BMS systems
- Motor control system/Industrial control system
- Power Meter/Instrument
- White Goods
- Vehicle-mounted system
- Battery-Powered Equipment
- Automotive Head Unit
- Security Equipment
- Communication Equipment

## DESCRIPTION

The RS3007 series is a set of low power high voltage regulators implemented in CMOS technology. Which can provide 300mA output current. The device allows input voltage as high as 45V. It is very suitable for multi-cell battery systems, bus voltage power supply systems and other high DC voltage systems. Wide input voltage can make it well withstand the impact of surge voltage and ensure the stability of output voltage.

The RS3007 series only consume 3uA (typical), Which is particularly important in battery power system, can reduce the standby power consumption of the whole system.

The RS3007 is available in Green SOT23-3, SOT23-5, SOT89-3L, SOT223 and SOP8 packages, for the different application's requirements.

### Device Information <sup>(1)</sup>

PART NUMBER	PACKAGE	BODY SIZE (NOM)
RS3007	SOT23-3(3)	1.60mmx2.92mm
	SOT23-5(5)	1.60mmx2.92mm
	SOT89-3L(3)	2.45mmx4.50mm
	SOT223(3)	3.50mm x 7.00mm
	SOP8(8)	4.90mm x 3.90mm

(1) For all available packages, see the orderable addendum at the next page of the data sheet.

### Typical Application Schematic

