



## 300mA Low Power Rejection Ratio Linear Regulator (LDO)

### 1 Main features:

- ◆ Input voltage range: 2V to 5.5V
- ◆ 300mA current load capacity
- ◆ Output voltage: 1V to 3.3V
- ◆ Ultra-low voltage drop: 370mV@300mA
- ◆ Ultra-low static current
- ◆ Ripple rejection ratio 75dB@1kHz
- ◆ Overtemperature protection
- ◆ Current limit protection
- ◆ Package: SOT23-5

### 2 Typical application

- ◆ PDMT, mobile phones, GPS, smart phones
- ◆ Wireless handheld device, wireless wearable device, Bluetooth device
- ◆ Portable multimedia device
- ◆ Battery powered applications

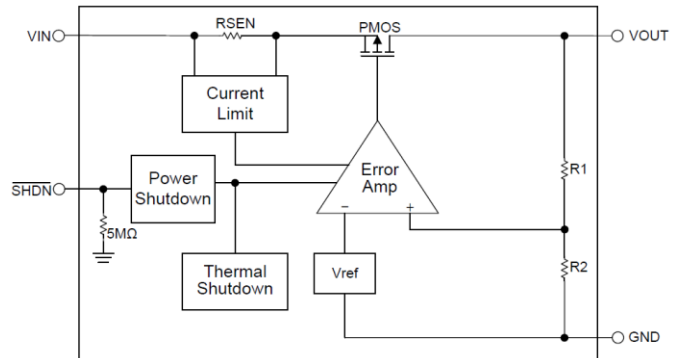
### 3 Product description

HL6183 is a linear regulator with low voltage difference, low noise, high PSRR and very low static current. The HL6183 can provide 300mA output current with a pressure difference of only 400mV and can be used in battery-powered systems such as portable wireless devices.

### 5 Compared with similar foreign products

	precision	Output range	Pressure drop	Turn-off current	Output current	Linear adjustment rate	Encapsulation form
FP6183 (钰太)	2%	1V - 3.3V	370mV@300mA	0.3uA	300mA	4mV	DFN-4L
HL6183	2%	1V - 3.3V	330mV@300mA	0.3uA	300mA	1mV	SOT23-5

When HL6183 is in off mode, the leakage current is only 0.1uA. The internal structure block diagram of the chip is as follows:



### 4 Product highlights

- ◆ Output noise 65uVrms (10Hz-100kHz).
- ◆ With high-precision reference voltage circuit and error amplifier, it can guarantee 2% output voltage accuracy in the whole temperature, voltage and load range.
- ◆ Excellent transient response performance.
- ◆ Built-in over current protection, over temperature protection, high safety, to avoid damage to the circuit after.
- ◆ The peripheral requires only 1uF capacitor to ensure stable output.