

### Load switch (DC-DC)

#### 1 Main feature

- ♦ Compatible with USB specification
- $\bullet$  Internal integrated 80mΩ power MOS
- ♦ Low supply current
- ♦ 15uA typical value in on/off state
- ♦ 1uA typical value in off state
- ♦ Wide voltage input 2.4V-5.5V
- ♦ Fast transient response <2uS
- Reverse current blocking
- Heat off protection
- Hot swap application
- ♦ Package: SOT23-5

# 2 Typical application

- ♦ USB peripheral
- USB bus and relay

### 3 Product description

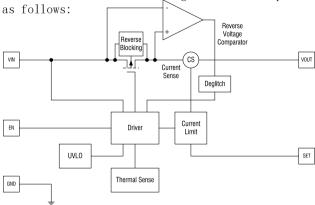
The HS9700 is a low-cost, low-voltage, single P-MOS load switch for self-powered and bus-powered USB applications. Switching operating voltage range

2.4V-5.5V, ideal for 3V and 5V systems.

## 5 Compare with similar products

Part No.	Input voltage range	Maximum output current	Static current	Turn-off current	Switching tube impedance	Encapsulation form
RT9701	2.2V~6V	1.1A	23uA	0.1uA	$100$ m $\Omega$	SOT23-5
HS9700	2.4V~5.5V	2A	15uA	0.1uA	$80 \mathrm{m}\Omega$	SOT23-5
SY6280	2.4V~5.5V	2A	25uA	0.1uA	80mΩ	SOT23-5

This switch has a low internal resistance of 80 m  $\Omega$  to meet the needs of USB drop voltage. The internal structure block diagram of the chip is



### 4 Product Highlights

- Compatible with USB specification
- Low turn-off current
- ◆ It has complete overtemperature protection function