

## General Description

The SY5322 is a highly integrated circuits with input under-voltage and over-voltage protection, abnormal load current protection, over temperature protection. The SY5322 is used at the front end of charging circuits or low-voltage systems to protect the low-voltage system from abnormal input faults and can withstand abnormal input voltages up to 28V. When the input voltage exceeds the overvoltage protection threshold, the internal MOSFET will be turned off within 1 $\mu$ s to protect the back-end low-voltage system. the IC can limit the input current through the resistance connecting ILIM and ground to prevent the input current of the low-voltage system from being too large; When detecting that the temperature exceeds the over temperature threshold, the IC will shut down the MOSFET and stops the power supply.

The SY5322 can be used to SOT23-6 package. The rated temperature is -40°C~+85°C.

## Applications

- ◆ Smart phone, mobile phone
- ◆ PADS
- ◆ MP3 Player
- ◆ Low-power handheld devices
- ◆ Bluetooth Earphone

## Features

- ◆ 28V input withstand voltage
- ◆ Input Over Voltage Protection
- ◆ The input OVP protection shutdown time is less than 1 $\mu$ s
- ◆ Soft-start to prevent Inrush currents
- ◆ Soft-stop to prevent voltage spikes
- ◆ Support Input Current from 100mA to 1.5A ; default 100mA if ILIM be left floating or 1.5A if ILIM be connected to ground
- ◆  $\pm$ 10% OCP accuracy (ILIM be connected a resistance to ground)
- ◆ Over temperature protection
- ◆ EN Function
- ◆ SOT23-6 Package

Typical Application Circuit

