

# 6V Over-Voltage and Over-Current Protection IC

### **DESCRIPTION**

The MT7255 integrated load switch provides a robust input over-current protection to downstream circuit systems. The device comes with built-in over-voltage protection, internal soft-start. The switch's low R<sub>DS(ON)</sub> minimizes power loss of the system. In the event of input over voltage, MT7255 immediately turns off the switch to prevent downstream system from stress of excessive high voltage. Current limit level can be set with an external resistor. Internal soft-start ensures a smooth ramp up of output voltage and limits the input in-rush current. MT7255 is available in DFN2X2\_8L or SOT23\_3L package.

#### **FEATURES**

- Wide Input Voltage Range from 2.7V to 6V Surge Up to 28V
- $50m\Omega$  Low R<sub>DS(ON)</sub> Protection Switch
- Built-in Over-Voltage Protection
- Discharge Output at OVP
- Internal Soft-Start
- Programmable Current Limit (DFN package Only)
  SOT23\_3L: 3A; Peak Current 4A
  DFN2x2\_8L: Programable up to 5A
- Hiccup Mode Protection for Over Load or Short Circuit
- Thermal Shutdown
- SOT23-3 or DFN2X2\_8L Package
- Pb-Free ROHS compliant

## **APPLICATIONS**

- Bluetooth Headsets
- HDD and SSD Drives
- Adapter Powered Devices
- Tablet PC
- PCI, PCIe Cards

## TYPICAL APPLICATION

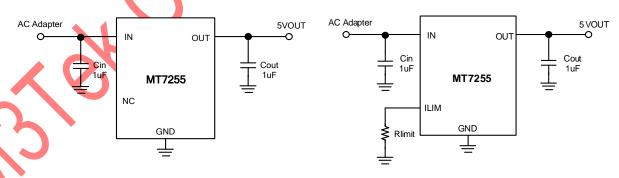


Figure 1. Typical Application