

4 Amp Over-Voltage Protection IC with Sense Output

Features

- Wide Input voltage range: 2.3V to 28V
- Up to 4A Continuous current capability
- Integrated 28mΩ (typ) N-Channel MOSFET
- Wide Over-Voltage threshold range
 - ▶ Fixed internal: 5.95V
 - ▶ Adjustable: 4V to 22V
- Fast OVP response time: 0.1μs (typ.)
- Internal 15ms Startup Debounce
- Integrated Surge Protection up to 100V
- Low Quiescent Current: 70μA (typ.)
- Thermal Shutdown and Short Circuit Protection
- Compliance to IEC61000-4-2 (Level 4)
 - ▶ Contact: ±8kV
 - ▶ Air Gap: ±15kV
- ESD Protection
 - ▶ Human Body Model: ±2kV
- Pb-free Package: 12-Bump WLCSP
- -40°C to +85°C Temperature Range

Brief Description

The KTS1681A over-voltage protection (OVP) device features an ultra-low 28mΩ (typical) on-resistance high current integrated MOSFET which actively protects low-voltage systems from voltage supply faults up to +28V_{DC}. An internal clamp protects the device from surges up to 100V.

An input voltage exceeding the over-voltage threshold will cause the internal MOSFET to turn off, preventing excessive voltage from damaging downstream devices. When the OVLO input set below the external OVLO select voltage, the KTS1681A automatically chooses the internal fixed OVLO threshold, preset to 5.95V (typical). The over-voltage protection threshold can be adjusted with optional resistor divider to a voltage between 4V and 22V.

The KTS1681A is protected against over-current faults by an internal over-temperature protection shutdown feature.

The KTS1681A is available in a RoHS and Green compliant 12-Bump 1.70mm x 1.21mm x 0.62mm WLCSP.

Applications

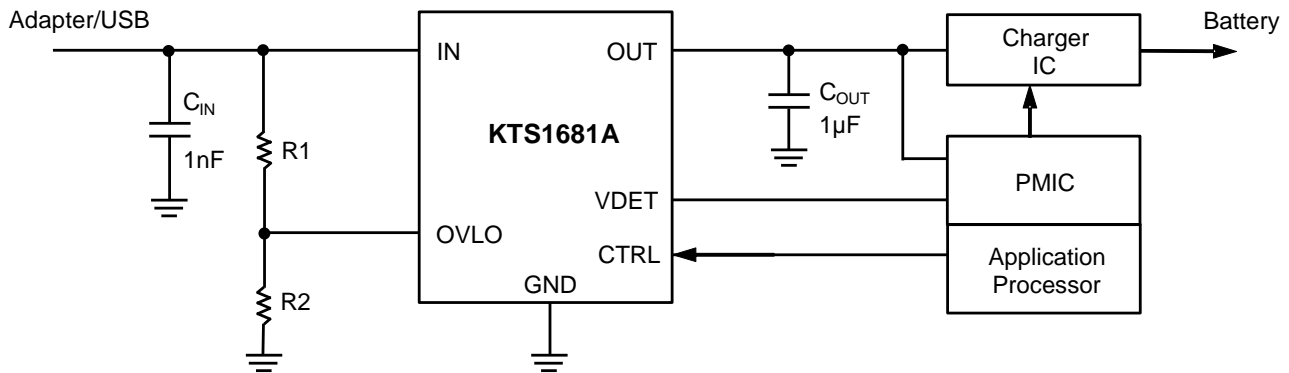
- Smartphones
- Tablet
- Mobile Internet Devices, Peripherals

Ordering Information

Part Number	Marking ¹	OVLO Threshold	Operating Temperature	Package
KTS1681AEUZ-TR	LGXXYYZZZZ	5.95V	-40°C to +85°C	WLCSP-12

1. "XXYYZZZZ" is the date code, assembly code and serial number.

Typical Application



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