

Over-Voltage Protection IC with Low R_{DS_ON} 29m Ω **Description**

The SM5335 Over-Voltage Protection device features a very low R_{DS_ON} resistance, typical 29m Ω , internal nFET for USB VBUS line. The nFET switch ensures safe and right current flow in both charging and host mode such as OTG while protecting the internal system circuits from any over voltage condition at VBUSIN pin.

The device also features an adjustable over-voltage threshold with a resistor divided network.

When the VBUS voltage exceeds the over-voltage protection threshold, the internal nFET is turned off to prevent any damage for downstream components and enhancing overall system robustness.

The device operates over a -40°C to +85°C ambient temperature range.

The SM5335 is available in a 9-bump, 1.15mm x 1.15mm, WLCSP package.

Applications

- Mobile Handsets and Tablets
- Wearable Devices

Features

- Over-Voltage Protection up to 29V DC
- A Very low R_{DS_ON} 29m Ω (typ.) n-Channel MOSFET
- Adjustable OVP Threshold from 4V to 23V
- Default 6.8V fixed OVP Threshold
- VBUS Input Voltage Range
 - . VBUS: 3.7V ~ 28V
- 4.5A Max Continuous Current Capability
- OTG Functionality on VBUS Path
- Active-low Switch Status Indicator Output
- 0.4mm pitch, 9-Bump WLCSP

Ordering Information

Part	VBUS OVP Threshold	Temp. Range	Pb-Free	Package
SM5335	Default 6.8V 4V to 23V Adjustable	-40°C to +85°C	Yes	9 WLCSP 0.4mm pitch

SM5335

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