

Over-Voltage Protection IC with Low R_{DS_ON} 8 m Ω

The SM5334 Over-Voltage Protection device features a very low R_{DS_ON} resistance, 8m Ω (typ), 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 overvoltage threshold with a resistor-divided network.

When the VBUS voltage exceeds the overvoltage 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 SM5334 is available in a 20-bump, 1.8mm x 2.2mm, WLCSP package.

Features

- Overvoltage Protection up to 29V DC
- Adjustable overvoltage threshold from 4V to 23V
- A Very low R_{DS_ON} 8m Ω (typ) n-Channel MOSFET
- VBUS Input Voltage Range
 - VBUS: 3.7V ~ 28V
 - 9A Max Continuous Current Capability
- Active Low Control for VBUS Path
- OTG Functionality on VBUS Path
- 0.4mm pitch, 20-Bump WLCSP

Applications

- Mobile Handsets and Tablets
- Wearable Devices

Ordering Information

Part	Temp. Range	Pb-Free	Package
SM5334	-40°C to +85°C	Yes	20 WLCSP 0.4mm pitch

SM5334

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