Adjustable Current Limited Power Distribution Switch

TPS2553D

FEATURES

- 2.8V to 5.5V Operating Range
- Adjustable Current Limit : 200 mA to 2.25 A
- Fold-back Short Circuit Protection
- 90 µA Typical On-State Supply Current
- 5.0 µA Maximum Standby Supply Current
- Independent Open-drain Fault Flag Pin
- Reverse Current Protection
- Thermal Shutdown Protection
- Under Voltage Lockout (UVLO)
- Output Auto Discharge Function

APPLICATIONS

• USB Peripherals

- General Purpose Power Switching
- ACPI Power Distribution
- Notebook PCs
- PDAs
- Hot Plug-in Power Supplies

DESCRIPTION

The TPS2553D is single-channel High-Side MOSFET switch optimized for adjustable current limited power distribution requiring circuit protection. The TPS2553D support the following USB requirements. The TPS2553D supply up to 2.25A as required by USB downstream devices. Maximum continuous current can be different on the types of package and ambient temperature. Switch's low on-resistance meets USB voltage drop requirement. Flag output indicates fault condition to the local USB controller. Soft-start prevents the transient voltage drop on the upstream port that can occur when the switch is enabled in bus-powered applications. Under voltage lockout (UVLO) feature disables the output switches until a valid input voltage. Auto discharge function quickly lowers the VOUT to the ground level when the TPS2553D turns off. Also the TPS2553D includes thermal shutdown to prevent switch failure from high-current loads and reverse current protection circuit to prevent the reverse current from VOUT pin to VIN pin.



ORDERING INFORMATION

Device	Package
TPS2553DSF6	SOT-23-6L

Please contact us for more information about this product.