

USB Power Loading Switch

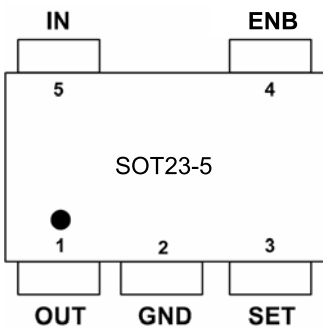
DESCRIPTION

The TPW5201 are Current Limited P-channel MOSFET power switches designed for high-side load-switching applications. The internal current-limiting circuit protects the input supply against large output short circuit current which may cause the supply to fall out of regulation. The current limit threshold is programmed with an external resistor from SET Pin to ground. The quiescent supply current is typically 8µA, making the device ideal for portable battery-operated equipment. In shutdown mode, the supply current decreases to less than 0.1µA.

Additional features include thermal shutdown to prevent catastrophic switch failure from high current loads, under-voltage lockout (UVLO) to ensure that the device remains off unless there is a valid input voltage present.

The TPW5201 are available in 5 pin SOT-23 packages.

Pin Configurations



FEATURES

- 2.4V to 5.5V Input voltage range
- Programmable Over Current Threshold
- Fast Transient Response:
- Low Quiescent Current
 - 8µA Normal Operation
 - 1µA Max in Shutdown
- 115mΩ typical RDS(ON)
- Only 1.8V needed for ON/OFF Control (ENB:Active Low)
- Under-Voltage Lockout
- Thermal Shutdown
- 4kV ESD Protection
- Available in SOT23-5 Package
- RoHS Compliant and 100% Lead(Pb)-Free

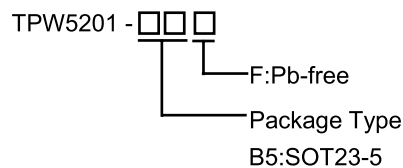
APPLICATIONS

- Peripheral ports
- Notebook computers
- Personal communication devices
- Hot swap supplies

Marking Information

For marking information, contact our sales representative directly or through a TPmicro distributor located in your area.

Ordering Information



Pin Description

SOT23-5	NAME	DESCRIPTION
1	OUT	Output Terminal. Connect a 0.47µF capacitor from VOUT to Ground
2	GND	Ground Connection.
3	SET	Current-Limit Set Input. Connect a resistor RSET from SET to ground to set the current limit for the switch.
4	ENB	Enable input , Active low. Set logic low to enable the device, and set logic high to disable the device.
5	IN	Input supply connection. Connect a 1µF capacitor from VIN to Ground