




TPS2553DBVR



ACTIVE


75mA - 1.5A, adjustable I_{LIMIT}, 2.5-6.5V, high enable, power switch, 85 mOhm

NEW - Custom reel may be available 


Enter quantity

Add to cart

Inventory: 262,958

DATA SHEET  Download the data sheet for the TPS2553 | [View all additional information for the TPS2553](#)

Quality information

RoHS	Yes
REACH	Yes
Lead finish / Ball material	NIPDAU
MSL rating / Peak reflow	Level-1-260C-UNLIM
Quality, reliability & packaging information 	View or download information

More TPS2553 information

[Parametrics](#)

[Technical documentation](#)

[Design & development](#)

[Support & training](#)

Packaging information

Package Pins	Package qty Carrier:	Operating temperature range (°C)
SOT-23 (DBV) 6	3,000 LARGE T&R <i>Custom reel may be available</i>	-40 to 85

 [View TI packaging information](#)

Features for the TPS2553

- Up to 1.5-A Maximum Load Current
- ±6% Current-Limit Accuracy at 1.7 A (Typical)
- Meets USB Current-Limiting Requirements
- Backwards Compatible With TPS2550 and TPS2551
- Adjustable Current Limit: 75 mA to 1700 mA (Typical)
- Constant-Current (TPS255x) and Latch-Off (TPS255x-1) Versions
- Fast Overcurrent Response - 2 μs (Typical)
- 85-mΩ High-Side MOSFET (DBV Package)
- Reverse Input-Output Voltage Protection
- Operating Range: 2.5 V to 6.5 V
- Built-In Soft Start
- 15-kV ESD Protection per IEC 61000-4-2 (With External Capacitance)
- UL Listed – File No. E169910 and NEMKO IEC60950-1-am1 ed2.0
- See the TI Switch Portfolio

Description for the TPS2553

The TPS255x and TPS255x-1 power-distribution switches are intended for applications where precision current limiting is required or heavy capacitive loads and short circuits are encountered and provide up to 1.5 A of continuous load current. These devices offer a programmable current-limit threshold between 75 mA and 1.7 A (typical) through an external resistor. Current-limit accuracy as tight as ±6% can be achieved at the higher current-limit settings. The power-switch rise and fall times are controlled to minimize current surges during turnon and turnoff.

TPS255x devices limit the output current to a safe level by using a constant-current mode when the output load exceeds the current-limit threshold. TPS255x-1 devices provide circuit breaker functionality by latching off the power switch during overcurrent or reverse-voltage situations. An internal reverse-voltage comparator disables the power-switch when the output voltage is driven higher than the input to protect devices on the input side of the switch. The FAULT output asserts low during overcurrent and reverse-voltage conditions.

Pricing

Qty	Price (EUR)
1-99	€0.478
100-249	€0.395
250-999	€0.284
1,000+	€0.213

Additional package qty | carrier options

TPS2553DBVT  ACTIVE

Package qty Carrier	250 SMALL T&R
Inventory	30,877
Qty Price (EUR)	1ku €0.245 

Enter quantity

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