

### DIST Single 6.5V 0.5A to 5A 8-Pin VSON EP T/R

Manufacturer:	Texas Instruments, Inc	
Package/Case:	SON8	TPS2557DRBT Image Images are for reference only
Product Type:	Switches	Inquiry
RoHS:	RoHS Compliant/Lead free RoHS	Inquity
Lifecycle:	Active	

### **General Description**

The TPS255x power-distribution switch is intended for applications where precision current limiting is required or heavy capacitive loads and short circuits are encountered. These devices offer a programmable current-limit threshold between 500 mA and 5 A (typical) through an external resistor. 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 switching into a constant-current mode when the output load exceeds the current-limit threshold. The FAULT logic output asserts low during overcurrent and overtemperature conditions.

### **Key Features**

Meets USB Current-Limiting Requirements

Adjustable Current Limit, 500 mA to 5 A (Typical)

±6.5% Current-Limit Accuracy at 4.5 A

Fast Overcurrent Response: 3.5-µs (Typical)

22-m $\Omega$  High-Side MOSFET

Operating Voltage: 2.5 V to 6.5 V

2-µA Maximum Standby Supply Current

Built-in Soft Start

15-kV and 8-kV System-Level ESD Capable

UL Listed: File No. E169910 and CB IEC60950-1-am2 ed2.0

#### Description

The TPS255x power-distribution switch is intended for applications where precision current limiting is required or heavy capacitive loads and short circuits are encountered. These devices offer a programmable current-limit threshold between 500mA and 5 A (typical) through an external resistor. 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 switching into a constant-current mode when the output load exceeds the current-limit threshold. The FAULT logic output asserts low during overcurrent and overtemperature conditions.





# 🟠 AVAQ

# 🏠 AVAQ

## **Recommended For You**

TPD3S014DBVR Texas Instruments, Inc SOT23-6

TPS2051BDR Texas Instruments, Inc SOP8

### TPS2116DRLR

Texas Instruments, Inc SOT5X3-8

TPS65150QPWPRQ1

Texas Instruments, Inc HTSSOP-24

TPS2115ADRBR Texas Instruments, Inc VSON8

# **TPS2065CDBVR** Texas Instruments, Inc SOT23-5

TPL7407LPWR Texas Instruments, Inc TSSOP16

TPS259460ARPWR Texas Instruments, Inc VQFN-10

TPS2410PWR Texas Instruments, Inc TSSOP-14

TPS2113ADRBR Texas Instruments, Inc SON8 TPS2042BDR

Texas Instruments, Inc SOP8

TPS23753APWR Texas Instruments, Inc TSSOP14

TPS23751PWPR Texas Instruments, Inc HTSSOP16

# **TPS22914BYFPR** Texas Instruments, Inc

DSBGA4

TPS51716RUKR Texas Instruments, Inc WQFN20