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# TPS22916BYFPT 🔮 ACTIVE

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5.5-V, 2-A, 60-m $\Omega$ , 10-nA leakage load switch with output discharge

Inventory: 71,330

DATA SHEET 🔼 Download the data sheet for the TPS22916 | View all additional information for the TPS22916

#### Quality information

	RoHS	Yes
	REACH	Yes
	Lead finish / Ball material	SNAGCU, SAC396
	MSL rating /	Level-1-260C-
	Peak reflow	UNLIM
	Peak reflow  Quality, reliability  & packaging information •	View or download

### More TPS22916 information

**Parametrics** 

Technical documentation

Design & development

Support & training

#### Packaging information

Package   Pins	Package qty   Carrier:	Operating temperature range (°C)
DSBGA (YFP)   4	250   SMALL T&R	-40 to 85

☑ View TI packaging information

#### Features for the TPS22916

- Input Operating Voltage Range (V<sub>IN</sub>): 1 V−5.5 V
- Maximum Continuous Current (I<sub>MAX</sub>): 2 A
- ON-Resistance (R<sub>ON</sub>):
  - $5 V_{IN} = 60 \text{ m}\Omega \text{ (typ)}, 100 \text{ m}\Omega \text{ (85°C max)}$
  - 1.8  $V_{IN}$  = 100 m $\Omega$  (typ), 150 m $\Omega$  (85°C max)
  - 1  $V_{IN}$  = 200 m $\Omega$  (typ), 325 m $\Omega$  (85°C max)
- Ultra-Low Power Consumption:
  - ON State (I<sub>Q</sub>): 0.5 μA (typ), 1 μA (max)
  - OFF State (I<sub>SD</sub>): 10 nA (typ), 100 nA (max)
  - TPS22916CL (I<sub>SD</sub>): 100 nA (typ), 300 nA (max)
- Smart ON Pin Pull Down (RPD):
  - ON ≥ V<sub>IH</sub> (I<sub>ON</sub>): 10 nA (max)
  - ∘ ON ≤  $V_{IL}$  ( $R_{PD}$ ): 750 kΩ (typ)
- Slow Timing in C Version Limits Inrush Current:
  - 5-V Turnon time ( $t_{ON}$ ): 1400  $\mu$ s at 5 mV/ $\mu$ s
  - 1.8-V Turnon time (t<sub>ON</sub>): 3000 μs at 1 mV/μs
  - 1-V Turnon time ( $t_{ON}$ ): 6500  $\mu$ s at 0.3 mV/ $\mu$ s
- Fast Timing in B Version Reduces Wait Time:
  - 5-V Turnon time (t<sub>ON</sub>): 115 μs at 57 mV/μs
  - 1.8-V Turnon time (t<sub>ON</sub>): 250 μs at 12 mV/μs
  - $\circ~$  1-V Turnon time (toN): 510  $\mu s$  at 3.3 mV/ $\mu s$
- Always-ON True Reverse Current Blocking (RCB):
  - Activation Current (I<sub>RCB</sub>): -500 mA (typ)
  - Reverse Leakage (I<sub>IN.RCB</sub>): −300 nA (max)
- Quick Output Discharge (QOD): 150 Ω (typ) (N version has no QOD)
- Active Low Enable Option (L Version)

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## Description for the TPS22916

The TPS22916xx is a small, single channel load switch using a low leakage P-Channel MOSFET for minimum power loss. Advanced gate control design supports operating voltages as low as 1 V with minimal increase in ON-Resistance and power loss.

### Pricing

Qty	Price (EUR)
1-99	€0.264
100-249	€0.179
250-999	€0.139
1,000+	€0.092

Additional package qty | carrier options •



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