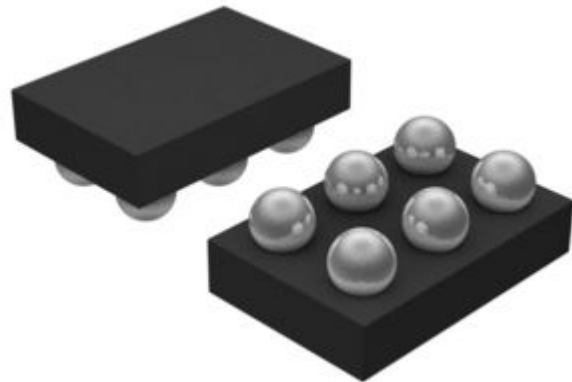




## TPS22932BYFPT Power Load Switch

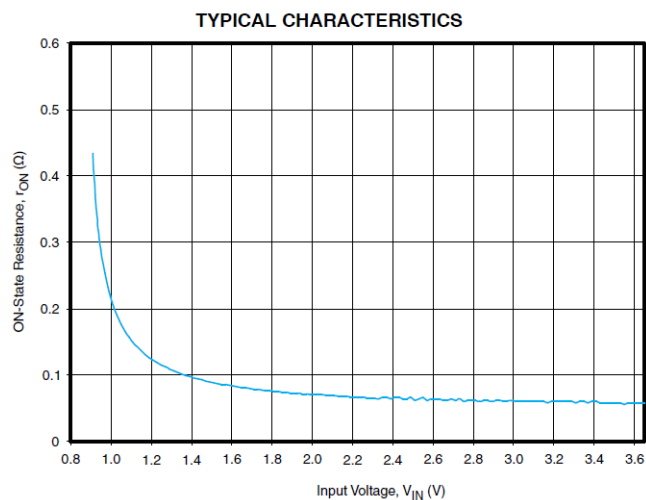
### General Description:

TPS22932B is a low  $r_{ON}$  load switch with controlled turn on. It contains an ultra-low  $r_{ON}$  P-channel MOSFET that can operate over an input voltage range of 1.1 V to 3.6 V. The switch is controlled by eight patterns of 3-bit input. The user can choose the logic functions MUX, AND, OR, NAND, NOR, inverter, and non-inverter. All inputs can be connected to  $V_{IN}$  or GND. The control pins can be connected to low voltage GPIOs allowing it to be controlled by whatever 1.2-V, 1.8-V, 2.5-V, or 3.3-V logic signals while keeping extremely low quiescent current. A 120- $\Omega$  on-chip load resistor is available for output quick discharge when the switch is turned off. The rise time (slew rate) of the device is internally controlled to avoid inrush current: the rise time of TPS22932B is 165  $\mu$ s. TPS22932B is available in a space-saving 6-terminal WCSP (YFP with 0.4-mm pitch). The device is characterized for operation over the free-air temperature range of  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$ .



### Key Features:

- Input Voltage: 1.1 V to 3.6 V
- Ultra-Low ON Resistance
  - $r_{ON} = 55\text{ m}\Omega$  at  $V_{IN} = 3.6\text{ V}$
  - $r_{ON} = 65\text{ m}\Omega$  at  $V_{IN} = 2.5\text{ V}$
  - $r_{ON} = 75\text{ m}\Omega$  at  $V_{IN} = 1.8\text{ V}$
  - $r_{ON} = 115\text{ m}\Omega$  at  $V_{IN} = 1.2\text{ V}$
- 500-mA Maximum Continuous Switch Current
- Quiescent Current  $< 1\text{ }\mu\text{A}$
- Shutdown Current  $< 1\text{ }\mu\text{A}$
- Low Control Threshold Allows Use of 1.2-V/1.8-V/2.5-V/3.3-V Logic
- Configurable Enable Logic
- Controlled Slew Rate to Avoid Inrush Currents: 165  $\mu$ s at 1.8 V
- ESD Performance Tested Per JESD 22



- 2000-V Human-Body Models (A114-B, Class II)
- 1000-V Charged-Device Model (C101)
- Six-Terminal Wafer-Chip-Scale Package (WCSP)
  - 0.8 mm × 1.2 mm,
  - 0.4-mm Pitch, 0.5-mm Height

## Applications:

- PDAs
- Cell Phones
- GPS Devices
- MP3 Players
- Digital Cameras
- Peripheral Ports
- Portable Instrumentation

## Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
TPS22932BYFPT	1782838	51R6141	Power Load Switch IC