

Product Overview

FPF2001: Full Function Load Switches

For complete documentation, see the data sheet.

The FPF2000 through FPF2007 is a family of load switches which provide full protection to systems and loads which may encounter large current conditions. These devices contain a 0.7W current-limited P-channel MOSFET which can operate over an input voltage range of 1.8-5.5V. Switch control is by a logic input (ON) capable of interfacing directly with low voltage control signals. Each part contains thermal shutdown protection which shuts off the switch to prevent damage to the part when a continuous over-current condition causes excessive heating. When the switch current reaches the current limit, the part operates in a constant current mode to prohibit excessive currents from causing damage. For the FPF2000-FPF2002 and FPF2004-FPF2006, if the constant current condition still persists after 10ms, these parts will shut off the switch and pull the fault signal pin (FLAGB) low. The FPF2000, FPF2001, FPF2004 and FPF2005, have an auto-restart feature which will turn the switch on again after 80ms if the ON pin is still active. The FPF2002 and FPF2006 do not have this auto-restart feature so the switch will remain off until the ON pin is cycled. For the FPF2003 and FPF2007, a current limit condition will immediately pull the fault signal pin low and the part will remain in the constant-current mode until the switch current falls below the current limit. For the FPF2000 through FPF2003, the minimum current limit is 50mA while that for the FPF2004 through FPF2007 is 100mA. These parts are available in a space-saving 5 pin SC-70 package.

Features

- 1.8 to 5.5V Input Voltage Range
- Controlled Turn-On
- 50mA and 100mA Current Limit Options
- Undervoltage Lockout
- Thermal Shutdown
- $1\mu\text{A}$ Shutdown Current
- Auto restart
- Fast Current limit Response Time
- 3 μs to Moderate Over Currents
- 20ns to Hard Shorts

For more features, see the data sheet

Applications

- Storage & Peripherals
- Other Wired Communications
- Mobile Handsets
- Wireless LAN Card & Broadband Access
- Media Tablets

Part Electrical Specifications

Product	Compliance	Status	Channels	r_{on} (m Ω)	I Max (A)	V_I Min (V)	V_I Max (V)	Package Type
FPF2001	Pb-free Halide free	Active	1	700	0.1	1.8	5.5	SC-88A-5 / SC-70-5

For more information please contact your local sales support at www.onsemi.com.

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