FAIRCHILD SEMICONDUCTOR®

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FSA2268 / FSA2268T Low-Voltage Dual-SPDT (0.4Ω) Analog Switch with 16kV ESD

Features

- 0.4Ω Typical On Resistance (R_{ON}) for +3.0V Supply
- 0.25Ω Maximum R_{ON} Flatness for +3.0V Supply
- -3db Bandwidth: > 50MHz
- Low I_{CCT} Current Over an Expanded Control Input Range
- Packaged in Pb-free 10-Lead µMLP (1.4 x 1.8mm)
- Power-Off Protection on Common Ports
- Broad V_{CC} Operating Range: 1.65 to 4.3V
- HBM JEDEC: JESD22-A114
  - I/O to GND: 13.5kV
  - Power to GND: 16.0kV
- Noise Immunity Termination Resistors in FSA2268T

Applications

- Cell Phone, PDA, Digital Camera, and Notebook
- LCD Monitor, TV, and Set-Top Box

Description

The FSA2268 is a high-performance, dual Single Pole Double Throw (SPDT) analog switch that features ultra-low R_{ON} of 0.4Ω (typical) at 3.0V V_{CC}. The FSA2268 operates over a wide V_{CC} range of 1.65V to 4.3V and is designed for break-before-make operation. The select input is TTL-level compatible.

The FSA2268 features very low quiescent current even when the control voltage is lower than the V_{CC} supply. This feature suits mobile handset applications by allowing direct interface with baseband processor general-purpose I/Os with minimal battery consumption.

The FSA2268T includes termination resistors that improve noise immunity during overshoot excursions, off-isolation coupling, or “pop-minimization.”

IMPORTANT NOTE:

For additional performance information, please contact analogswitch@fairchildsemi.com.

Ordering Information

Part Number	Package Number	Top Mark	Pb-Free	Package Description
FSA2268UMX	MLP010A	GF	Yes	10-Lead, Quad Ultrathin Molded Leadless Package (MLP), 1.4 x 1.8mm, 0.4mm pitch
FSA2268TUMX	MLP010A	GH	Yes	10-Lead, Quad Ultrathin Molded Leadless Package (MLP), 1.4 x 1.8mm, 0.4mm pitch

Analog Symbols

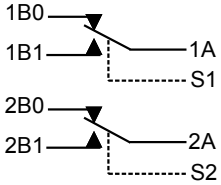

Figure 1. FSA2268

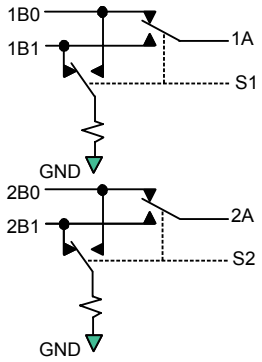

Figure 2. FSA2268T (with Noise Termination Resistors)

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CoolFET™	*i-Lo*™	POP™	Stealth™	TinyPower™
CROSSVOLT™	ImpliedDisconnect™	Power247™	SuperFET™	TinyPWM™
DOME™	IntelliMAX™	PowerEdge™	SuperSOT™-3	TruTranslation™
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EnSigna™	MICROCOUPLER™	QFET®	SyncFET™	VCX™
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FACT Quiet Series™	MicroPak™	QT Optoelectronics™		
FAST®	MICROWIRE™	Quiet Series™		
FASTr™	MSX™	RapidConfigure™	Across the board. Around the world.™	
FPS™	MSXPro™	RapidConnect™	Programmable Active Droop™	
FRFET™	OCX™	ScalarPump™	The Power Franchise®	

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PRODUCT STATUS DEFINITIONS

Definition of Terms

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