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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	Top Mark	🌿 Eco Status	Package Description
FSA2268UMX	GF	RoHS	10-Lead, Quad Ultrathin Molded Leadless Package (UMLP), 1.4 x 1.8mm, 0.4mm pitch
FSA2268TUMX	GH	RoHS	10-Lead, Quad Ultrathin Molded Leadless Package (UMLP), 1.4 x 1.8mm, 0.4mm pitch
FSA2268L10X	GH	Green	10-Lead, MicroPak™, 1.6mm Wide

🌿 *For Fairchild's definition of "green" Eco Status, please visit: http://www.fairchildsemi.com/company/green/rohs_green.html.*
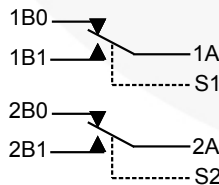
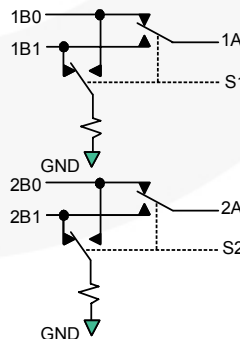## Analog Symbols

Figure 1. FSA2268

Figure 2. FSA2268T (with Noise Termination Resistors)

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Definition of Terms

Datasheet Identification	Product Status	Definition
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No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
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