Product Overview

NLAS4599: Single SPDT Analog Switch Single Supply

For complete documentation, see the data sheet.

The NLAS4599 is an advanced high speed CMOS single pole - double throw analog switch fabricated with silicon gate CMOS technology. It achieves high speed propagation delays and low ON resistances while maintaining low power dissipation. This switch controls analog and digital voltages that may vary across the full power-supply range (from VCC to GND). The device has been designed so the ON resistance (RON) is much lower and more linear over input voltage than RON of typical CMOS analog switches. The channel select input is compatible with standard CMOS outputs; with a pull-up resistor, it is compatible with LSTTL outputs. The channel select input structure provides protection when voltages between 0 V and 5.5 V are applied, regardless of the supply voltage. This input structure helps prevent device destruction caused by supply voltage - input/output voltage mismatch, battery backup, hot insertion, etc.

Features

- Channel Select Input Over-Voltage Tolerant to 5.5 V
- Fast Switching and Propagation Speeds
- Break-Before-Make Circuitry
- Low Power Dissipation: ICC = 2 mA (Max) at TA= 25°C
- Diode Protection Provided on Channel Select Input
- Improved Linearity and Lower ON Resistance over Input Voltage
- Latchup Performance Exceeds 300 mA
- ESD Performance: HBM > 2000 V; MM > 200 V, CDM > 1500 V
- Chip Complexity: 38 FETs

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Channels	Number of Switches	Configuration	I_{cc} Max (µA)	r_{on} Max (Ω)	V_{CC} Min (V)	V_{CC} Max (V)	Package Type
NLAS4599DFT2G	0.1	Pb-free Halide free non AEC-Q and PPAP	Active	1	2	SPDT	2	30	2	5.5	SC-88-6 / SC-70-6 / SOT-363-6
NLAS4599DTT1G	0.1112	Pb-free Halide free non AEC-Q and PPAP	Active	1	2	SPDT	2	30	2	5.5	TSOP-6
NLVAS4599DTT1G	0.1333	AEC Qualified PPAP Capable Pb-free Halide free	Active	1	2	SPDT	2	30	2	5.5	TSOP-6

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

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