

## FEATURES

**Low on resistance: 0.8  $\Omega$  maximum at 125°C**  
**0.25  $\Omega$  maximum on resistance flatness**  
**1.8 V to 5.5 V single supply**  
**200 mA current carrying capability**  
**Automotive temperature range: -40°C to +125°C**  
**Rail-to-rail operation**  
**6-lead SOT-23, 8-lead MSOP, and 6-ball WLCSP packages**  
**Fast switching times**  
**Typical power consumption (<0.01  $\mu$ W)**  
**TTL-/CMOS-compatible inputs**  
**Pin compatible with the [ADG719](#)**

## APPLICATIONS

**Power routing**  
**Battery-powered systems**  
**Communication systems**  
**Data acquisition systems**  
**Cellular phones**  
**Modems**  
**PCMCIA cards**  
**Hard drives**  
**Relay replacement**

## GENERAL DESCRIPTION

The [ADG819](#) is a monolithic, CMOS, single-pole, double-throw (SPDT) switch. This switch is designed on a submicron process that provides low power dissipation yet gives high switching speed, low on resistance, and low leakage currents.

Low power consumption and an operating supply range of 1.8 V to 5.5 V make the [ADG819](#) ideal for battery-powered, portable instruments.

Each switch of the [ADG819](#) conducts equally well in both directions when on. The [ADG819](#) exhibits break-before-make switching action, thus preventing momentary shorting when switching channels.

The [ADG819](#) is available in a 6-lead SOT-23 package, an 8-lead MSOP package, and in a 6-ball WLCSP package. This chip occupies only a 1.14 mm  $\times$  2.18 mm area, making it the ideal candidate for space-constrained applications.

## FUNCTIONAL BLOCK DIAGRAM

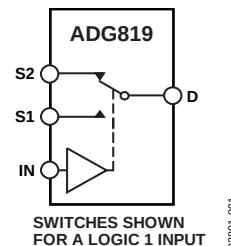


Figure 1.

## PRODUCT HIGHLIGHTS

1. Very low on resistance, 0.5  $\Omega$  typical.
2. 1.8 V to 5.5 V single-supply operation.
3. High current carrying capability.
4. Tiny 6-lead SOT-23, 8-lead MSOP, and 6-ball, 1.14 mm  $\times$  2.18 mm WLCSP packages.

### Rev. A

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## REVISION HISTORY

### 5/12—Rev. 0 to Rev. A

|                                                                             |           |
|-----------------------------------------------------------------------------|-----------|
| Updated Format.....                                                         | Universal |
| Deleted ADG820 .....                                                        | Universal |
| Changes to General Description .....                                        | 1         |
| Changes to Table 1 .....                                                    | 3         |
| Changes to Table 2.....                                                     | 4         |
| Change to WLCSP $\theta_{JA}$ Thermal Impedance Parameter,<br>Table 3 ..... | 5         |
| Added Table 5 and Table 6; Renumbered Sequentially .....                    | 6         |
| Deleted Test Circuit 6; Renumbered Sequentially .....                       | 8         |
| Changes to Figure 11 to Figure 14.....                                      | 8         |
| Changes to Terminology Section.....                                         | 11        |
| Updated Outline Dimensions .....                                            | 12        |
| Changes to Ordering Guide .....                                             | 13        |

### 5/02—Revision 0: Initial Version

## SPECIFICATIONS

$V_{DD} = 5\text{ V} \pm 10\%$ ,  $GND = 0\text{ V}$ , unless otherwise noted.

Table 1.

| Parameter                                                          | 25°C  | −40°C to<br>+85°C | −40°C to<br>+125°C | Unit              | Test Conditions/Comments                                                                   |
|--------------------------------------------------------------------|-------|-------------------|--------------------|-------------------|--------------------------------------------------------------------------------------------|
| <b>ANALOG SWITCH</b>                                               |       |                   |                    |                   |                                                                                            |
| Analog Signal Range                                                |       |                   | 0 V to $V_{DD}$    | V                 |                                                                                            |
| On Resistance, $R_{ON}$ <sup>1</sup>                               | 0.5   |                   |                    | $\Omega$ typ      | $V_S = 0\text{ V to }V_{DD}$ , $I_S = 100\text{ mA}$ ; see Figure 16                       |
|                                                                    | 0.6   | 0.7               | 0.8                | $\Omega$ max      |                                                                                            |
| On Resistance Match Between Channels, $\Delta R_{ON}$ <sup>1</sup> | 0.06  |                   |                    | $\Omega$ typ      | $V_S = 0\text{ V to }V_{DD}$ , $I_S = 100\text{ mA}$                                       |
|                                                                    | 0.08  | 0.1               | 0.12               | $\Omega$ max      |                                                                                            |
| On Resistance Flatness, $R_{FLAT(ON)}$ <sup>1</sup>                | 0.1   |                   |                    | $\Omega$ typ      | $V_S = 0\text{ V to }V_{DD}$ , $I_S = 100\text{ mA}$                                       |
|                                                                    | 0.17  | 0.2               | 0.25               | $\Omega$ max      |                                                                                            |
| <b>LEAKAGE CURRENTS</b>                                            |       |                   |                    |                   |                                                                                            |
| Source Off Leakage, $I_S$ (Off)                                    | ±0.01 |                   |                    | nA typ            | $V_{DD} = 5.5\text{ V}$                                                                    |
|                                                                    | ±0.25 | ±3                | ±10                | nA max            | $V_S = 4.5\text{ V/1 V}$ , $V_D = 1\text{ V/4.5 V}$ ; see Figure 17                        |
| Channel On Leakage, $I_D$ , $I_S$ (On)                             | ±0.01 |                   |                    | nA typ            | $V_S = V_D = 1\text{ V}$ , or $V_S = V_D = 4.5\text{ V}$ ; see Figure 18                   |
|                                                                    | ±0.25 | ±3                | ±25                | nA max            |                                                                                            |
| <b>DIGITAL INPUTS</b>                                              |       |                   |                    |                   |                                                                                            |
| Input High Voltage, $V_{INH}$                                      |       |                   | 2.0                | V min             |                                                                                            |
| Input Low Voltage, $V_{INL}$                                       |       |                   | 0.8                | V max             |                                                                                            |
| Input Current<br>$I_{INL}$ or $I_{INH}$                            | 0.005 |                   |                    | $\mu\text{A}$ typ | $V_{IN} = V_{INL}$ or $V_{INH}$                                                            |
|                                                                    |       |                   | ±0.1               | $\mu\text{A}$ max |                                                                                            |
| Digital Input Capacitance, $C_{IN}$                                | 5     |                   |                    | pF typ            |                                                                                            |
| <b>DYNAMIC CHARACTERISTICS<sup>2</sup></b>                         |       |                   |                    |                   |                                                                                            |
| $t_{ON}$                                                           | 35    |                   |                    | ns typ            | $R_L = 50\ \Omega$ , $C_L = 35\text{ pF}$ , $V_S = 3\text{ V}$ ; see Figure 19             |
|                                                                    | 45    | 50                | 55                 | ns max            |                                                                                            |
| $t_{OFF}$                                                          | 10    |                   |                    | ns typ            | $R_L = 50\ \Omega$ , $C_L = 35\text{ pF}$ , $V_S = 3\text{ V}$ ; see Figure 19             |
|                                                                    | 16    | 18                | 21                 | ns max            |                                                                                            |
| Break-Before-Make Time Delay,<br>$t_{BBM}$                         | 5     |                   |                    | ns typ            | $R_L = 50\ \Omega$ , $C_L = 35\text{ pF}$ , $V_{S1} = V_{S2} = 3\text{ V}$ ; see Figure 20 |
|                                                                    |       |                   | 1                  | ns min            |                                                                                            |
| Charge Injection                                                   | 20    |                   |                    | pC typ            | $V_S = 2.5\text{ V}$ , $R_S = 0\ \Omega$ , $C_L = 1\text{ nF}$ ; see Figure 21             |
| Off Isolation                                                      | −71   |                   |                    | dB typ            | $R_L = 50\ \Omega$ , $C_L = 5\text{ pF}$ , $f = 100\text{ kHz}$ ; see Figure 22            |
| Channel-to-Channel Crosstalk                                       | −72   |                   |                    | dB typ            | $R_L = 50\ \Omega$ , $C_L = 5\text{ pF}$ , $f = 100\text{ kHz}$ ; see Figure 24            |
| Bandwidth, −3 dB                                                   | 17    |                   |                    | MHz typ           | $R_L = 50\ \Omega$ , $C_L = 5\text{ pF}$ ; see Figure 23                                   |
| $C_S$ (Off)                                                        | 80    |                   |                    | pF typ            | $f = 1\text{ MHz}$                                                                         |
| $C_D$ , $C_S$ (On)                                                 | 300   |                   |                    | pF typ            | $f = 1\text{ MHz}$                                                                         |
| <b>POWER REQUIREMENTS</b>                                          |       |                   |                    |                   |                                                                                            |
| $I_{DD}$                                                           | 0.001 |                   |                    | $\mu\text{A}$ typ | $V_{DD} = 5.5\text{ V}$ , digital inputs = 0 V or 5.5 V                                    |
|                                                                    |       | 1.0               | 2.0                | $\mu\text{A}$ max |                                                                                            |

<sup>1</sup> On resistance parameters tested with  $I_S = 10\text{ mA}$ .

<sup>2</sup> Guaranteed by design; not subject to production test.

$V_{DD} = 2.7 \text{ V}$  to  $3.6 \text{ V}$ ,  $GND = 0 \text{ V}$ , unless otherwise noted.

**Table 2.**

| Parameter                                                  | 25°C       | –40°C to<br>+85°C | –40°C to<br>+125°C | Unit                                   | Test Conditions/Comments                                                                      |
|------------------------------------------------------------|------------|-------------------|--------------------|----------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>ANALOG SWITCH</b>                                       |            |                   |                    |                                        |                                                                                               |
| Analog Signal Range                                        |            |                   | 0 V to $V_{DD}$    | V                                      |                                                                                               |
| On Resistance, $R_{ON}^1$                                  | 0.7        |                   |                    | $\Omega$ typ                           | $V_S = 0 \text{ V}$ to $V_{DD}$ , $I_S = 100 \text{ mA}$ ; see Figure 16                      |
|                                                            | 1.4        | 1.5               | 1.6                | $\Omega$ max                           |                                                                                               |
| On Resistance Match Between<br>Channels, $\Delta R_{ON}^1$ | 0.06       |                   |                    | $\Omega$ typ                           | $V_S = 0 \text{ V}$ to $V_{DD}$ , $I_S = 100 \text{ mA}$                                      |
|                                                            |            | 0.13              | 0.13               | $\Omega$ max                           |                                                                                               |
| On Resistance Flatness, $R_{FLAT(ON)}^1$                   | 0.25       |                   |                    | $\Omega$ typ                           | $V_S = 0 \text{ V}$ to $V_{DD}$ , $I_S = 100 \text{ mA}$                                      |
| <b>LEAKAGE CURRENTS</b>                                    |            |                   |                    |                                        |                                                                                               |
| Source Off Leakage, $I_S$ (Off)                            | $\pm 0.01$ |                   |                    | nA typ                                 | $V_{DD} = 3.6 \text{ V}$                                                                      |
|                                                            | $\pm 0.25$ | $\pm 3$           | $\pm 10$           | nA max                                 | $V_S = 3.3 \text{ V}/1 \text{ V}$ , $V_D = 1 \text{ V}/3.3 \text{ V}$ ; see Figure 17         |
| Channel On Leakage, $I_D$ , $I_S$ (On)                     | $\pm 0.01$ |                   |                    | nA typ                                 | $V_S = V_D = 1 \text{ V}$ , or $V_S = V_D = 3.3 \text{ V}$ ; see Figure 18                    |
|                                                            | $\pm 0.25$ | $\pm 3$           | $\pm 25$           | nA max                                 |                                                                                               |
| <b>DIGITAL INPUTS</b>                                      |            |                   |                    |                                        |                                                                                               |
| Input High Voltage, $V_{INH}$                              |            |                   | 2.0                | V min                                  |                                                                                               |
| Input Low Voltage, $V_{INL}$                               |            |                   | 0.8                | V max                                  |                                                                                               |
| Input Current<br>$I_{INL}$ or $I_{INH}$                    | 0.005      |                   | $\pm 0.1$          | $\mu\text{A}$ typ<br>$\mu\text{A}$ max | $V_{IN} = V_{INL}$ or $V_{INH}$                                                               |
| Digital Input Capacitance, $C_{IN}$                        | 5          |                   |                    | pF typ                                 |                                                                                               |
| <b>DYNAMIC CHARACTERISTICS<sup>2</sup></b>                 |            |                   |                    |                                        |                                                                                               |
| $t_{ON}$                                                   | 40         |                   |                    | ns typ                                 | $R_L = 50 \Omega$ , $C_L = 35 \text{ pF}$ , $V_S = 1.5 \text{ V}$ ; see Figure 19             |
|                                                            | 60         | 65                | 70                 | ns max                                 |                                                                                               |
| $t_{OFF}$                                                  | 10         |                   |                    | ns typ                                 | $R_L = 50 \Omega$ , $C_L = 35 \text{ pF}$ , $V_S = 1.5 \text{ V}$ ; see Figure 19             |
|                                                            | 16         | 18                | 21                 | ns max                                 |                                                                                               |
| Break-Before-Make Time Delay,<br>$t_{BBM}$                 | 40         |                   |                    | ns typ                                 | $R_L = 50 \Omega$ , $C_L = 35 \text{ pF}$ , $V_{S1} = V_{S2} = 1.5 \text{ V}$ ; see Figure 20 |
|                                                            |            |                   | 1                  | ns min                                 |                                                                                               |
| Charge Injection                                           | 10         |                   |                    | pC typ                                 | $V_S = 1.5 \text{ V}$ , $R_S = 0 \Omega$ , $C_L = 1 \text{ nF}$ ; see Figure 21               |
| Off Isolation                                              | –71        |                   |                    | dB typ                                 | $R_L = 50 \Omega$ , $C_L = 5 \text{ pF}$ , $f = 100 \text{ kHz}$ ; see Figure 22              |
| Channel-to-Channel Crosstalk                               | –72        |                   |                    | dB typ                                 | $R_L = 50 \Omega$ , $C_L = 5 \text{ pF}$ , $f = 100 \text{ kHz}$ ; see Figure 24              |
| Bandwidth, –3 dB                                           | 17         |                   |                    | MHz typ                                | $R_L = 50 \Omega$ , $C_L = 5 \text{ pF}$ ; see Figure 23                                      |
| $C_S$ (Off)                                                | 80         |                   |                    | pF typ                                 | $f = 1 \text{ MHz}$                                                                           |
| $C_D$ , $C_S$ (On)                                         | 300        |                   |                    | pF typ                                 | $f = 1 \text{ MHz}$                                                                           |
| <b>POWER REQUIREMENTS</b>                                  |            |                   |                    |                                        |                                                                                               |
| $I_{DD}$                                                   | 0.001      |                   |                    | $\mu\text{A}$ typ                      | $V_{DD} = 3.6 \text{ V}$ , digital Inputs = 0 V or 3.6 V                                      |
|                                                            |            | 1.0               | 2.0                | $\mu\text{A}$ max                      |                                                                                               |

<sup>1</sup> On resistance parameters tested with  $I_S = 10 \text{ mA}$ .

<sup>2</sup> Guaranteed by design; not subject to production test.

## ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$ , unless otherwise noted

Table 3.

| Parameter                             | Rating                                                      |
|---------------------------------------|-------------------------------------------------------------|
| $V_{DD}$ to GND                       | –0.3 V to +7 V                                              |
| Analog Inputs <sup>1</sup>            | –0.3 V to $V_{DD} + 0.3$ V or 30 mA, whichever occurs first |
| Digital Inputs <sup>1</sup>           | –0.3 V to $V_{DD} + 0.3$ V or 30 mA, whichever occurs first |
| Peak Current, Sx or D                 | 400 mA (pulsed at 1 ms, 10% duty cycle maximum)             |
| Continuous Current, Sx or D           | 200 mA                                                      |
| Operating Temperature Range           |                                                             |
| Industrial                            | –40°C to +85°C                                              |
| Automotive                            | –40°C to +125°C                                             |
| Storage Temperature Range             | –65°C to +150°C                                             |
| Junction Temperature                  | 150°C                                                       |
| MSOP                                  |                                                             |
| $\theta_{JA}$ Thermal Impedance       | 206°C/W                                                     |
| $\theta_{JC}$ Thermal Impedance       | 44°C/W                                                      |
| SOT-23 (4-Layer Board)                |                                                             |
| $\theta_{JA}$ Thermal Impedance       | 119°C/W                                                     |
| WLCSP (4-Layer Board)                 |                                                             |
| $\theta_{JA}$ Thermal Impedance       | 80°C/W                                                      |
| Lead Temperature, Soldering (10 sec)  | 300°C                                                       |
| IR Reflow, Peak Temperature (<20 sec) | 235°C                                                       |

<sup>1</sup> Overvoltages at IN, Sx, or D are clamped by internal diodes. Current should be limited to the maximum ratings given.

Stresses above those listed under Absolute Maximum Ratings may cause permanent damage to the device. This is a stress rating only; functional operation of the device at these or any other conditions above those indicated in the operational section of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Only one absolute maximum rating can be applied at any one time.

Table 4. Truth Table for the ADG819

| IN | Switch S1 | Switch S2 |
|----|-----------|-----------|
| 0  | On        | Off       |
| 1  | Off       | On        |

### ESD CAUTION



**ESD (electrostatic discharge) sensitive device.** Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

## PIN CONFIGURATIONS AND FUNCTION DESCRIPTIONS

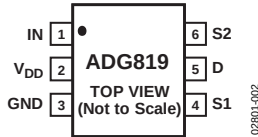


Figure 2. 6-Lead SOT-23 Pin Configuration

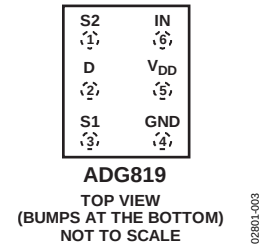


Figure 3. 6-Ball WLCSP Pin Configuration

Table 5. 6-Lead SOT-23 and 6-Ball WLCSP Pin Function Descriptions

| Pin No. |       | Mnemonic        | Description                                 |
|---------|-------|-----------------|---------------------------------------------|
| SOT-23  | WLCSP |                 |                                             |
| 1       | 6     | IN              | Logic Control Input.                        |
| 2       | 5     | V <sub>DD</sub> | Most Positive Power Supply Potential.       |
| 3       | 4     | GND             | Ground (0 V) Reference.                     |
| 4       | 3     | S1              | Source Terminal. Can be an input or output. |
| 5       | 2     | D               | Drain Terminal. Can be an input or output.  |
| 6       | 1     | S2              | Source Terminal. Can be an input or output. |

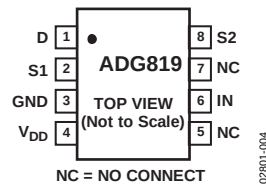


Figure 4. 8-Lead MSOP Pin Configuration

Table 6. 8-Lead MSOP Pin Function Descriptions

| Pin No. | Mnemonic        | Description                                 |
|---------|-----------------|---------------------------------------------|
| 1       | D               | Drain Terminal. Can be an input or output.  |
| 2       | S1              | Source Terminal. Can be an input or output. |
| 3       | GND             | Ground (0 V) Reference.                     |
| 4       | V <sub>DD</sub> | Most Positive Power Supply Potential.       |
| 5       | NC              | No Connect. Do not connect to this pin.     |
| 6       | IN              | Logic Control Input.                        |
| 7       | NC              | No Connect. Do not connect to this pin.     |
| 8       | S2              | Source Terminal. Can be an input or output. |

## TYPICAL PERFORMANCE CHARACTERISTICS

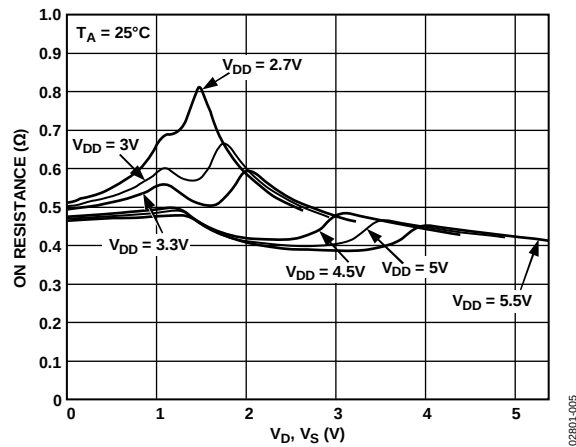
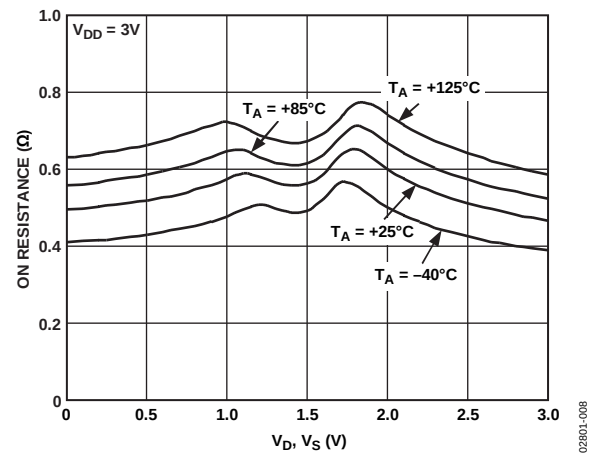
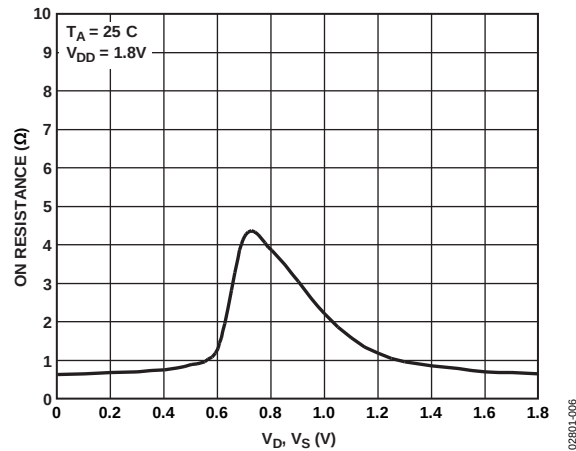
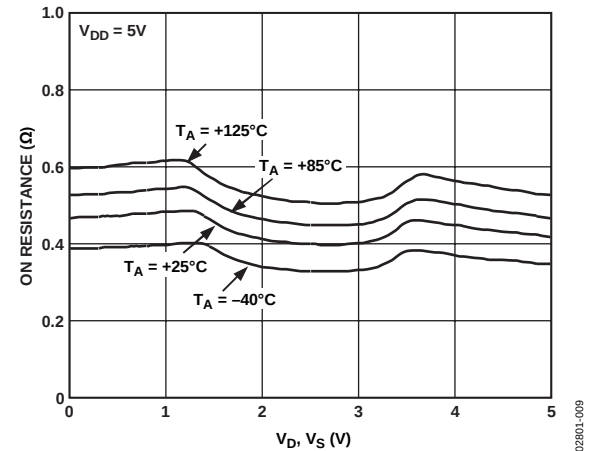
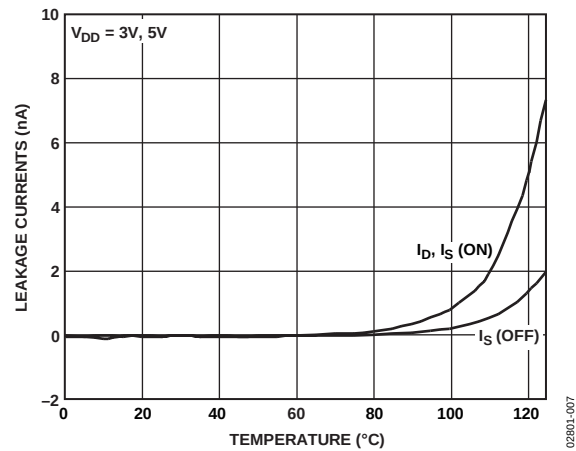
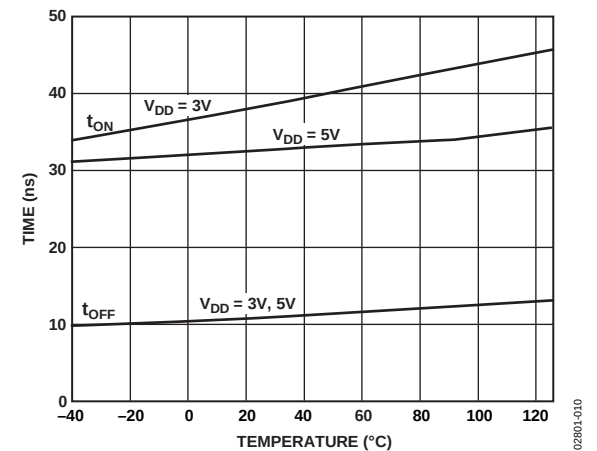
Figure 5. On Resistance vs.  $V_D$ ,  $V_S$ Figure 8. On Resistance vs.  $V_D$ ,  $V_S$  for Different TemperaturesFigure 6. On Resistance vs.  $V_D$ ,  $V_S$ Figure 9. On Resistance vs.  $V_D$ ,  $V_S$  for Different Temperatures

Figure 7. Leakage Currents vs. Temperature

Figure 10.  $t_{ON}/t_{OFF}$  Times vs. Temperature

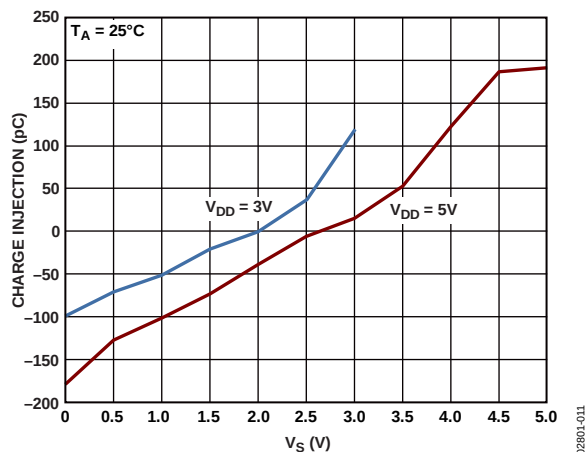
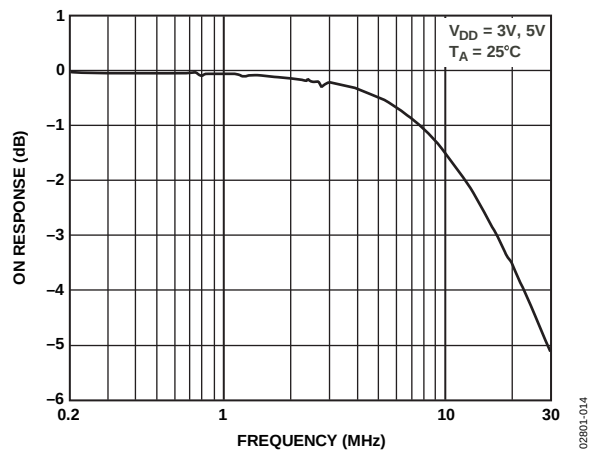
Figure 11. Charge Injection vs.  $V_S$  (Source Voltage)

Figure 14. On Response vs. Frequency

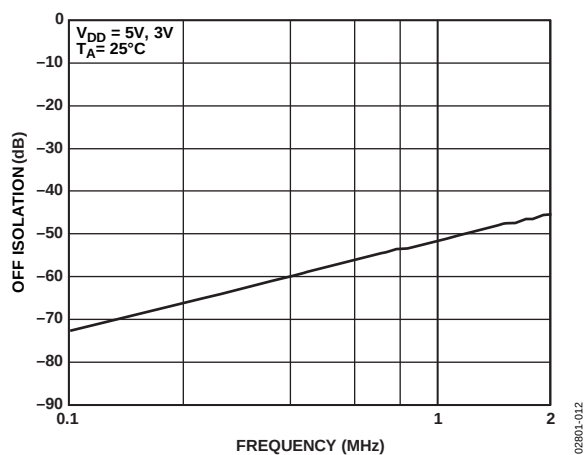


Figure 12. Off Isolation vs. Frequency

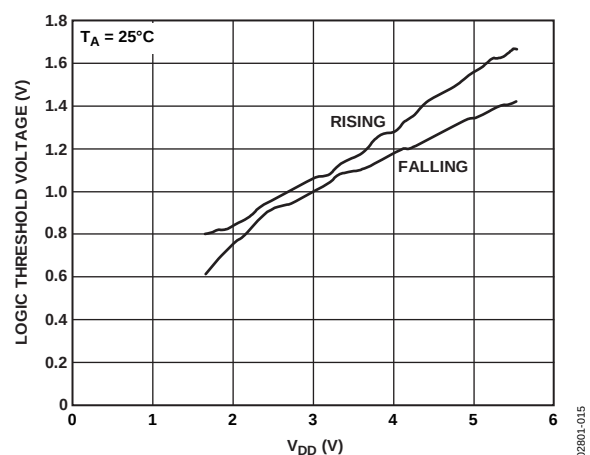


Figure 15. Logic Threshold Voltage vs. Supply Voltage

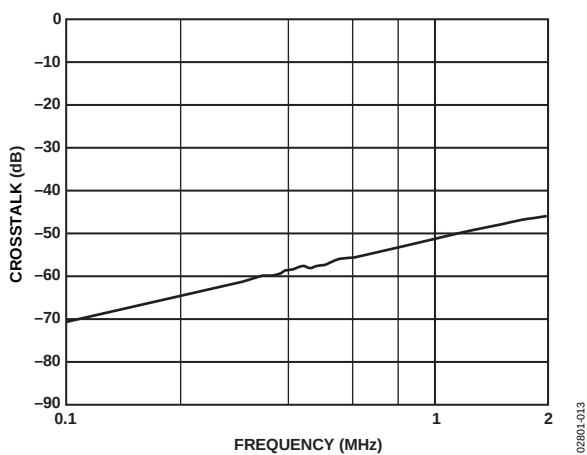


Figure 13. Crosstalk vs. Frequency



## TEST CIRCUITS

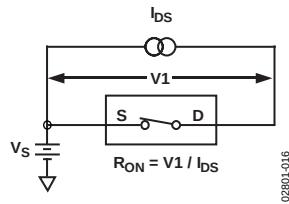


Figure 16. On Resistance

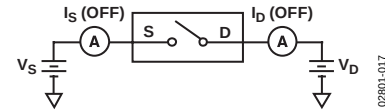


Figure 17. Off Leakage

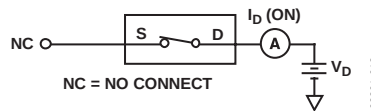


Figure 18. On Leakage

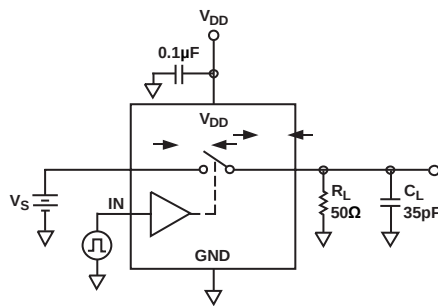


Figure 19. Switching Times

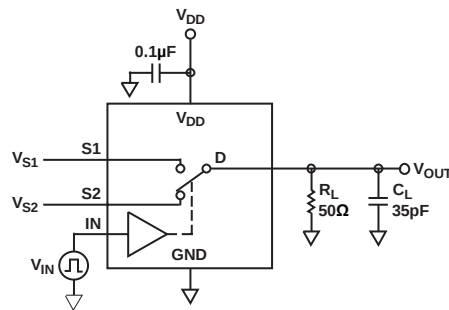
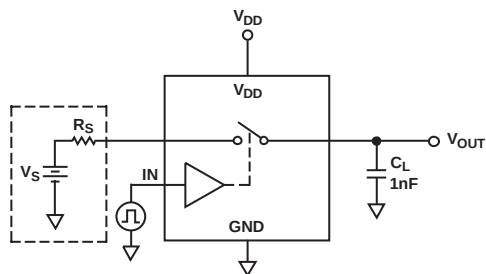
Figure 20. Break-Before-Make Time Delay,  $t_{BBM}$ 

Figure 21. Charge Injection

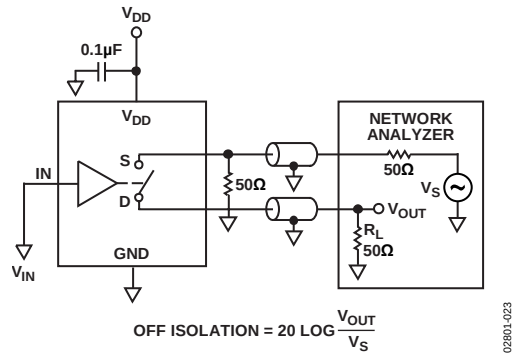


Figure 22. Off Isolation

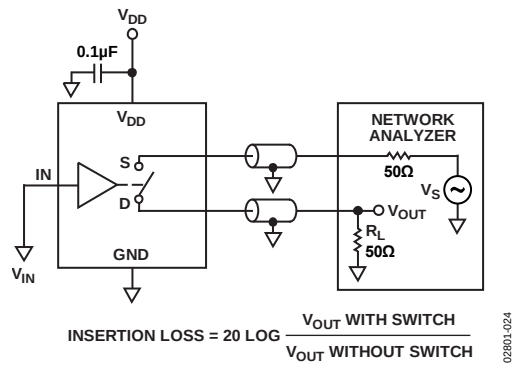


Figure 23. Bandwidth

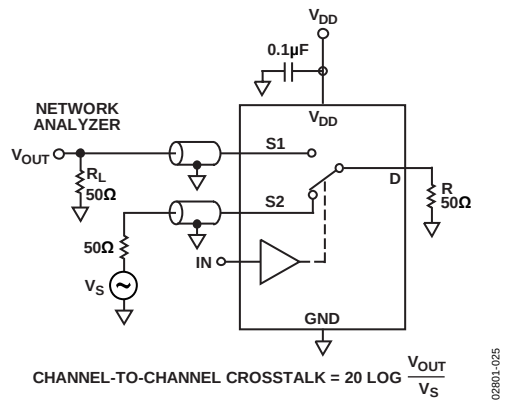


Figure 24. Channel-to-Channel Crosstalk

## TERMINOLOGY

**$R_{ON}$**

Ohmic resistance between D and Sx.

**$\Delta R_{ON}$**

On resistance match between any two channels, that is,  $R_{ON}$  maximum –  $R_{ON}$  minimum.

**$R_{FLAT(ON)}$**

Flatness is defined as the difference between the maximum and minimum value of on resistance as measured over the specified analog signal range.

**$I_s$  (Off)**

Source leakage current with the switch off.

**$I_D, I_s$  (On)**

Channel leakage current with the switch on.

**$V_D$  ( $V_s$ )**

Analog voltage on Terminal D and Terminal S.

**$V_{INL}$**

Maximum input voltage for Logic 0.

**$V_{INH}$**

Minimum input voltage for Logic 1.

**$I_{INL}$  ( $I_{INH}$ )**

Input current of the digital input.

**$C_s$  (Off)**

Off switch source capacitance.

**$C_D, C_s$  (On)**

On switch capacitance.

**$t_{ON}$**

Delay between applying the digital control input and the output switching on.

**$t_{OFF}$**

Delay between applying the digital control input and the output switching off.

**$t_{BBM}$**

Off time or on time measured between the 90% points of both switches when switching from one address state to another.

### Charge Injection

A measure of the glitch impulse transferred from the digital input to the analog output during switching.

### Channel-to-Channel Crosstalk

A measure of unwanted signal coupled through from one channel to another as a result of parasitic capacitance.

### Off Isolation

A measure of unwanted signal coupling through an off switch.

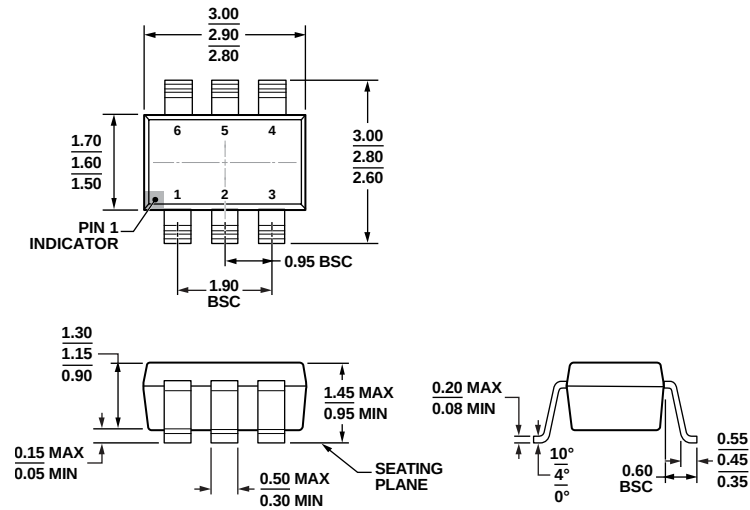
### Bandwidth

Frequency at which the output is attenuated by –3 dB.

### On Response

Frequency response of the on switch.

## OUTLINE DIMENSIONS

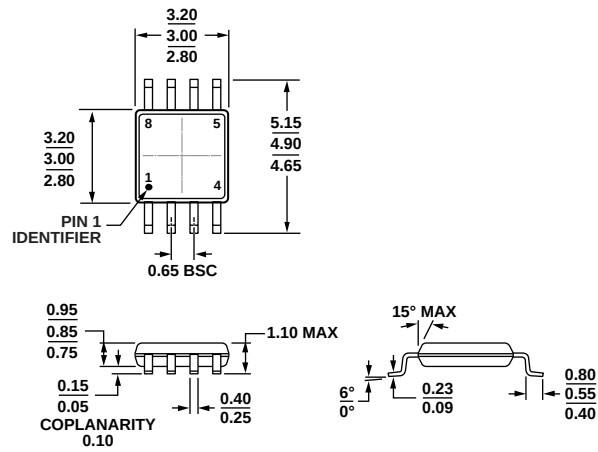


COMPLIANT TO JEDEC STANDARDS MO-178-AB

Figure 25. 6-Lead Small Outline Transistor Package [SOT-23]  
(RJ-6)

Dimensions shown in millimeters

12-16-2008-A



COMPLIANT TO JEDEC STANDARDS MO-187-AA

Figure 26. 8-Lead mini Small Outline Package [MSOP]  
(RM-8)

Dimensions shown in millimeters

10-07-2008-B

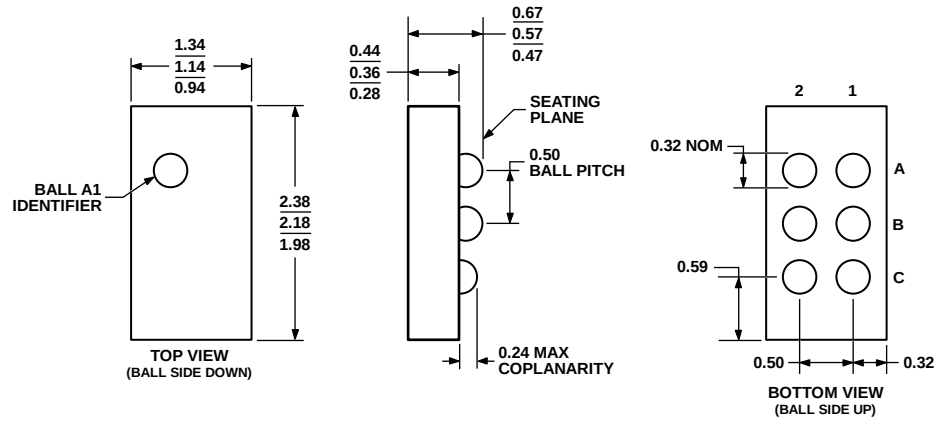


Figure 27. 6-Ball Wafer Level Chip Scale Package [WLCSP]  
(CB-6-1)  
Dimensions shown in millimeters

## ORDERING GUIDE

| Model <sup>1</sup> | Notes        | Temperature Range | Package Description                              | Package Option | Branding <sup>2</sup> |
|--------------------|--------------|-------------------|--------------------------------------------------|----------------|-----------------------|
| ADG819BCBZ-REEL    | <sup>3</sup> | −40°C to +85°C    | 6-Ball Wafer Level Chip Package [WLCSP]          | CB-6-1         | SBC                   |
| ADG819BCBZ-REEL7   | <sup>3</sup> | −40°C to +85°C    | 6-Ball Wafer Level Chip Package [WLCSP]          | CB-6-1         | SBC                   |
| ADG819BRM          |              | −40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]         | RM-8           | SNB                   |
| ADG819BRM-REEL     |              | −40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]         | RM-8           | SNB                   |
| ADG819BRMZ         |              | −40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]         | RM-8           | SBC                   |
| ADG819BRMZ-REEL7   | <sup>3</sup> | −40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]         | RM-8           | SBC                   |
| ADG819BRT-500RL7   | <sup>3</sup> | −40°C to +125°C   | 6-Lead Small Outline Transistor Package [SOT-23] | RJ-6           | SNB                   |
| ADG819BRT-REEL7    | <sup>3</sup> | −40°C to +125°C   | 6-Lead Small Outline Transistor Package [SOT-23] | RJ-6           | SNB                   |
| ADG819BRTZ-500RL7  | <sup>3</sup> | −40°C to +125°C   | 6-Lead Small Outline Transistor Package [SOT-23] | RJ-6           | SBC                   |
| ADG819BRTZ-REEL    | <sup>3</sup> | −40°C to +125°C   | 6-Lead Small Outline Transistor Package [SOT-23] | RJ-6           | SBC                   |
| ADG819BRTZ-REEL7   | <sup>3</sup> | −40°C to +125°C   | 6-Lead Small Outline Transistor Package [SOT-23] | RJ-6           | SBC                   |

<sup>1</sup> Z = RoHS Compliant Part.

<sup>2</sup> Branding on these packages is limited to three characters due to space constraints.

<sup>3</sup> Contact factory for availability.

**NOTES**

## NOTES

**NOTES**



## Данный компонент на территории Российской Федерации

**Вы можете приобрести в компании MosChip.**

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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