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REVISION HISTORY

|                                  |           |
|----------------------------------|-----------|
| 8/09—Rev. B to Rev. C            |           |
| Updated Format.....              | Universal |
| Changes to Table 1.....          | 3         |
| Changes to Table 2.....          | 4         |
| Updated Outline Dimensions ..... | 12        |
| Changes to Ordering Guide .....  | 13        |

# SPECIFICATIONS

## DUAL SUPPLY

$V_{DD} = 15\text{ V} \pm 10\%$ ,  $V_{SS} = -15\text{ V} \pm 10\%$ ,  $V_L = 5\text{ V} \pm 10\%$ ,  $GND = 0\text{ V}$ , unless otherwise noted.

Table 1.

| Parameter <sup>1</sup>                                   | B Version                          |                |                 | T Version                          |                 | Unit   | Test Conditions/Comments                                                                                        |
|----------------------------------------------------------|------------------------------------|----------------|-----------------|------------------------------------|-----------------|--------|-----------------------------------------------------------------------------------------------------------------|
|                                                          | +25°C                              | −40°C to +85°C | −40°C to +125°C | +25°C                              | −55°C to +125°C |        |                                                                                                                 |
| ANALOG SWITCH                                            |                                    |                |                 |                                    |                 |        |                                                                                                                 |
| Analog Signal Range                                      | V <sub>SS</sub> to V <sub>DD</sub> |                |                 | V <sub>SS</sub> to V <sub>DD</sub> |                 |        |                                                                                                                 |
| R <sub>ON</sub>                                          | 25                                 |                |                 | 25                                 |                 | Ω typ  | V <sub>D</sub> = ±12.5 V, I <sub>S</sub> = −10 mA                                                               |
|                                                          | 35                                 | 45             | 45              | 35                                 | 45              | Ω max  | V <sub>DD</sub> = +13.5 V, V <sub>SS</sub> = −13.5 V                                                            |
| LEAKAGE CURRENTS                                         |                                    |                |                 |                                    |                 |        |                                                                                                                 |
| Source Off Leakage, I <sub>S</sub> (Off)                 | ±0.1                               |                |                 | ±0.1                               |                 | nA typ | V <sub>DD</sub> = +16.5 V, V <sub>SS</sub> = −16.5 V                                                            |
| Drain Off Leakage, I <sub>D</sub> (Off)                  | ±0.25                              | ±5             | ±15             | ±0.25                              | ±15             | nA max | V <sub>D</sub> = ±15.5 V, V <sub>S</sub> = ∓15.5 V; see Figure 12                                               |
|                                                          | ±0.1                               |                |                 | ±0.1                               |                 | nA typ | V <sub>D</sub> = ±15.5 V, V <sub>S</sub> = ∓15.5 V; see Figure 12                                               |
| Channel On Leakage, I <sub>D</sub> , I <sub>S</sub> (On) | ±0.75                              | ±5             | ±30             | ±0.75                              | ±30             | nA max | V <sub>S</sub> = V <sub>D</sub> = ±15.5 V; see Figure 13                                                        |
|                                                          | ±0.4                               |                |                 | ±0.4                               |                 | nA typ |                                                                                                                 |
|                                                          | ±0.75                              | ±5             | ±30             | ±0.75                              | ±30             | nA max |                                                                                                                 |
| DIGITAL INPUTS                                           |                                    |                |                 |                                    |                 |        |                                                                                                                 |
| Input High Voltage, V <sub>INH</sub>                     | 2.4                                |                |                 | 2.4                                |                 | V min  |                                                                                                                 |
| Input Low Voltage, V <sub>INL</sub>                      | 0.8                                |                |                 | 0.8                                |                 | V max  |                                                                                                                 |
| Input Current<br>I <sub>INL</sub> or I <sub>INH</sub>    | ±0.005                             |                |                 | ±0.005                             |                 | μA typ | V <sub>IN</sub> = V <sub>INL</sub> or V <sub>INH</sub>                                                          |
|                                                          | ±0.5                               |                |                 | ±0.5                               |                 | μA max |                                                                                                                 |
| DYNAMIC CHARACTERISTICS <sup>2</sup>                     |                                    |                |                 |                                    |                 |        |                                                                                                                 |
| t <sub>TRANSITION</sub>                                  | 160                                | 200            | 200             | 145                                | 200             | ns max | R <sub>L</sub> = 300 Ω, C <sub>L</sub> = 35 pF; V <sub>S1</sub> = ±10 V, V <sub>S2</sub> = ∓10 V; see Figure 14 |
| Break-Before-Make Time Delay, t <sub>D</sub>             | 30                                 |                |                 | 30                                 |                 | ns typ | R <sub>L</sub> = 300 Ω, C <sub>L</sub> = 35 pF; V <sub>S1</sub> = V <sub>S2</sub> = ±10 V; see Figure 15        |
| Off Isolation                                            | 5                                  |                |                 | 5                                  |                 | ns min |                                                                                                                 |
| Channel-to-Channel Crosstalk                             | 80                                 |                |                 | 80                                 |                 | dB typ | R <sub>L</sub> = 50 Ω, f = 1 MHz; see Figure 16                                                                 |
| C <sub>S</sub> (Off)                                     | 90                                 |                |                 | 70                                 |                 | dB typ | R <sub>L</sub> = 50 Ω, f = 1 MHz; see Figure 17                                                                 |
| C <sub>D</sub> , C <sub>S</sub> (On)                     | 6                                  |                |                 | 6                                  |                 | pF typ | f = 1 MHz                                                                                                       |
|                                                          | 55                                 |                |                 | 55                                 |                 | pF typ | f = 1 MHz                                                                                                       |
| POWER REQUIREMENTS                                       |                                    |                |                 |                                    |                 |        |                                                                                                                 |
| I <sub>DD</sub>                                          | 0.0001                             |                |                 | 0.0001                             |                 | μA typ | V <sub>DD</sub> = +16.5 V, V <sub>SS</sub> = −16.5 V                                                            |
|                                                          | 1                                  | 2.5            | 2.5             | 1                                  | 2.5             | μA max | V <sub>IN</sub> = 0 V or 5 V                                                                                    |
| I <sub>SS</sub>                                          | 0.0001                             |                |                 | 0.0001                             |                 | μA typ |                                                                                                                 |
|                                                          | 1                                  | 2.5            | 2.5             | 1                                  | 2.5             | μA max |                                                                                                                 |
| I <sub>L</sub>                                           | 0.0001                             |                |                 | 0.0001                             |                 | μA typ | V <sub>L</sub> = 5.5 V                                                                                          |
|                                                          | 1                                  | 2.5            | 2.5             | 1                                  | 2.5             | μA max |                                                                                                                 |

<sup>1</sup> Temperature ranges are as follows: B Version:  $-40^\circ\text{C}$  to  $+125^\circ\text{C}$ ; T Version:  $-55^\circ\text{C}$  to  $+125^\circ\text{C}$ .

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

# ADG419

## SINGLE SUPPLY

$V_{DD} = 12\text{ V} \pm 10\%$ ,  $V_{SS} = 0\text{ V}$ ,  $V_L = 5\text{ V} \pm 10\%$ ,  $GND = 0\text{ V}$ , unless otherwise noted.

Table 2.

| Parameter <sup>1</sup>                 | B Version  |                |                 | T Version  |                 | Unit              | Test Conditions/Comments                                                                                                       |
|----------------------------------------|------------|----------------|-----------------|------------|-----------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                                        | +25°C      | –40°C to +85°C | –40°C to +125°C | +25°C      | –55°C to +125°C |                   |                                                                                                                                |
| ANALOG SWITCH                          |            |                |                 |            |                 |                   |                                                                                                                                |
| Analog Signal Range                    |            |                | 0 to $V_{DD}$   |            | 0 to $V_{DD}$   | V                 |                                                                                                                                |
| $R_{ON}$                               | 40         |                |                 | 40         |                 | $\Omega$ typ      | $V_D = 3\text{ V}$ , $8.5\text{ V}$ , $I_S = -10\text{ mA}$                                                                    |
|                                        |            | 60             | 70              |            | 70              | $\Omega$ max      | $V_{DD} = 10.8\text{ V}$                                                                                                       |
| LEAKAGE CURRENT                        |            |                |                 |            |                 |                   |                                                                                                                                |
| Source OFF Leakage, $I_S$ (Off)        | $\pm 0.1$  |                |                 | $\pm 0.1$  |                 | nA typ            | $V_{DD} = 13.2\text{ V}$                                                                                                       |
|                                        | $\pm 0.25$ | $\pm 5$        | $\pm 15$        | $\pm 0.25$ | $\pm 15$        | nA max            | $V_D = 12.2\text{ V}/1\text{ V}$ , $V_S = 1\text{ V}/12.2\text{ V}$ ;                                                          |
| Drain OFF Leakage, $I_D$ (Off)         | $\pm 0.1$  |                |                 | $\pm 0.1$  |                 | nA typ            | see Figure 12                                                                                                                  |
|                                        | $\pm 0.75$ | $\pm 5$        | $\pm 30$        | $\pm 0.75$ | $\pm 30$        | nA max            | $V_D = 12.2\text{ V}/1\text{ V}$ , $V_S = 1\text{ V}/12.2\text{ V}$ ;                                                          |
| Channel ON Leakage, $I_D$ , $I_S$ (On) | $\pm 0.4$  |                |                 | $\pm 0.4$  |                 | nA typ            | see Figure 12                                                                                                                  |
|                                        | $\pm 0.75$ | $\pm 5$        | $\pm 30$        | $\pm 0.75$ | $\pm 30$        | nA max            | $V_S = V_D = 12.2\text{ V}/1\text{ V}$ ; see Figure 13                                                                         |
| DIGITAL INPUTS                         |            |                |                 |            |                 |                   |                                                                                                                                |
| Input High Voltage, $V_{INH}$          |            | 2.4            | 2.4             |            | 2.4             | V min             |                                                                                                                                |
| Input Low Voltage, $V_{INL}$           |            | 0.8            | 0.8             |            | 0.8             | V max             |                                                                                                                                |
| Input Current                          |            |                |                 |            |                 |                   |                                                                                                                                |
| $I_{INL}$ or $I_{INH}$                 |            | $\pm 0.005$    | $\pm 0.005$     |            | $\pm 0.005$     | $\mu\text{A}$ typ | $V_{IN} = V_{INL}$ or $V_{INH}$                                                                                                |
|                                        |            | $\pm 0.5$      | $\pm 0.5$       |            | $\pm 0.5$       | $\mu\text{A}$ max |                                                                                                                                |
| DYNAMIC CHARACTERISTICS <sup>2</sup>   |            |                |                 |            |                 |                   |                                                                                                                                |
| $t_{TRANSITION}$                       | 180        | 250            | 250             | 170        | 250             | ns max            | $R_L = 300\Omega$ , $C_L = 35\text{ pF}$ ; $V_{S1} = 0\text{ V}/8\text{ V}$ , $V_{S2} = 8\text{ V}/0\text{ V}$ ; see Figure 14 |
| Break-Before-Make Time Delay, $t_D$    | 60         |                |                 | 60         |                 | ns typ            | $R_L = 300\Omega$ , $C_L = 35\text{ pF}$ ;                                                                                     |
|                                        |            |                |                 |            |                 |                   | $V_{S1} = V_{S2} = 8\text{ V}$ ; see Figure 15                                                                                 |
| Off Isolation                          | 80         |                |                 | 80         |                 | dB typ            | $R_L = 50\Omega$ , $f = 1\text{ MHz}$ ; see Figure 16                                                                          |
| Channel-to-Channel Crosstalk           | 90         |                |                 | 70         |                 | dB typ            | $R_L = 50\Omega$ , $f = 1\text{ MHz}$ ; see Figure 17                                                                          |
| $C_S$ (Off)                            | 13         |                |                 | 13         |                 | pF typ            | $f = 1\text{ MHz}$                                                                                                             |
| $C_D$ , $C_S$ (On)                     | 65         |                |                 | 65         |                 | pF typ            | $f = 1\text{ MHz}$                                                                                                             |
| POWER REQUIREMENTS                     |            |                |                 |            |                 |                   |                                                                                                                                |
| $I_{DD}$                               | 0.0001     |                |                 | 0.0001     |                 | $\mu\text{A}$ typ | $V_{DD} = 13.2\text{ V}$                                                                                                       |
|                                        | 1          | 2.5            | 2.5             | 1          | 2.5             | $\mu\text{A}$ max | $V_{IN} = 0\text{ V}$ or $5\text{ V}$                                                                                          |
| $I_L$                                  | 0.0001     |                |                 | 0.0001     |                 | $\mu\text{A}$ typ | $V_L = 5.5\text{ V}$                                                                                                           |
|                                        | 1          | 2.5            | 2.5             | 1          | 2.5             | $\mu\text{A}$ max |                                                                                                                                |

<sup>1</sup> Temperature ranges are as follows: B Version: –40°C to +125°C; T Version: –55°C to +125°C.

<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 $V_{SS}$                                          | 44 V                                                                             |
| $V_{DD}$ to GND                                               | $-0.3\text{ V to }+25\text{ V}$                                                  |
| $V_{SS}$ to GND                                               | $+0.3\text{ V to }-25\text{ V}$                                                  |
| $V_L$ to GND                                                  | $-0.3\text{ V to }V_{DD} + 0.3\text{ V}$                                         |
| Analog, Digital Inputs <sup>1</sup>                           | $V_{SS} - 2\text{ V to }V_{DD} + 2\text{ V}$<br>or 30 mA, whichever occurs first |
| Continuous Current, S or D                                    | 30 mA                                                                            |
| Peak Current, S or D (Pulsed at 1 ms, 10% Duty-Cycle Maximum) | 100 mA                                                                           |
| Operating Temperature Range                                   |                                                                                  |
| Industrial (B Version)                                        | $-40^\circ\text{C to }+125^\circ\text{C}$                                        |
| Extended (T Version)                                          | $-55^\circ\text{C to }+125^\circ\text{C}$                                        |
| Storage Temperature Range                                     | $-65^\circ\text{C to }+150^\circ\text{C}$                                        |
| Junction Temperature                                          | 150°C                                                                            |
| CERDIP Package, Power Dissipation                             | 600 mW                                                                           |
| $\theta_{JA}$ , Thermal Impedance                             | 110°C/W                                                                          |
| Lead Temperature, Soldering (10 sec)                          | 300°C                                                                            |
| PDIP Package, Power Dissipation                               | 400 mW                                                                           |
| $\theta_{JA}$ , Thermal Impedance                             | 100°C/W                                                                          |
| Lead Temperature, Soldering (10 sec)                          | 260°C                                                                            |
| SOIC Package, Power Dissipation                               | 400 mW                                                                           |
| $\theta_{JA}$ , Thermal Impedance                             | 155°C/W                                                                          |
| MSOP Package, Power Dissipation                               | 315 mW                                                                           |
| $\theta_{JA}$ , Thermal Impedance                             | 205°C/W                                                                          |
| Lead Temperature, Soldering                                   |                                                                                  |
| Vapor Phase (60 sec)                                          | 215°C                                                                            |
| Infrared (15 sec)                                             | 220°C                                                                            |

<sup>1</sup>Overvoltages at IN, S or D is clamped by internal diodes. Limit current 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.

### 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.

# ADG419

## PIN CONFIGURATION AND FUNCTION DESCRIPTIONS

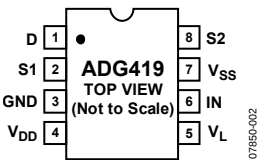


Figure 2. Pin Configuration

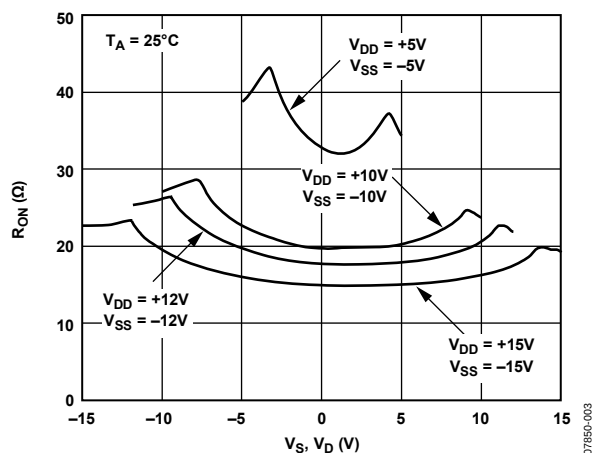
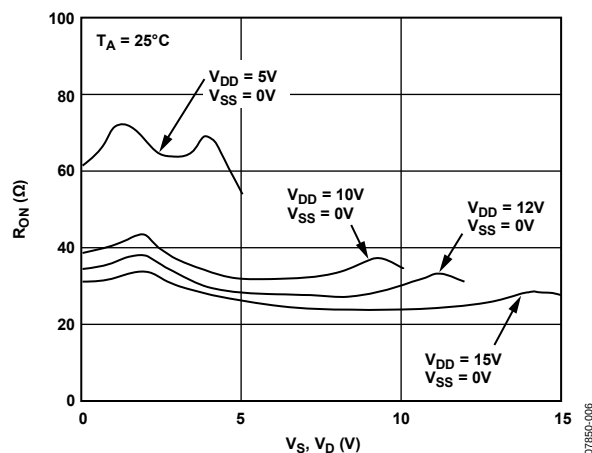
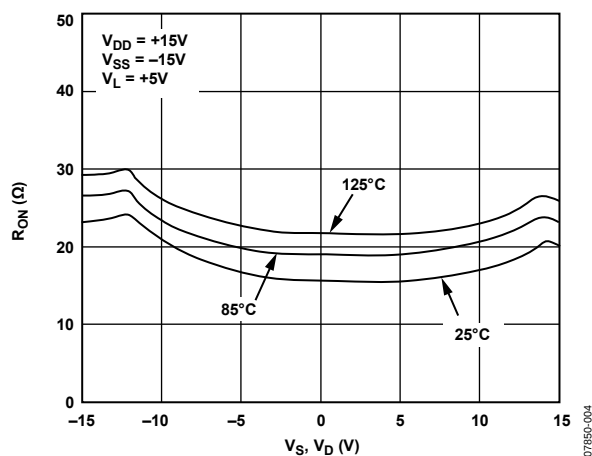
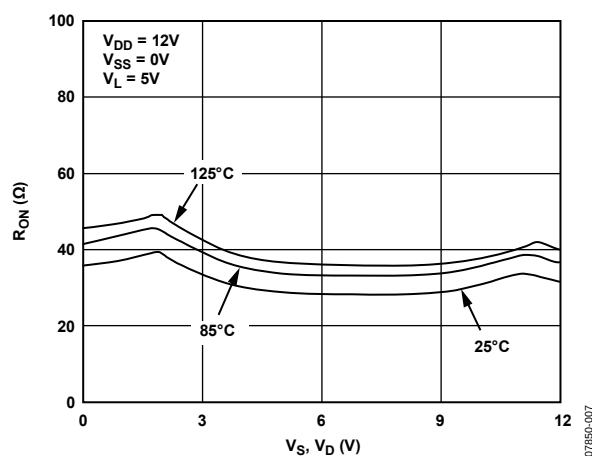
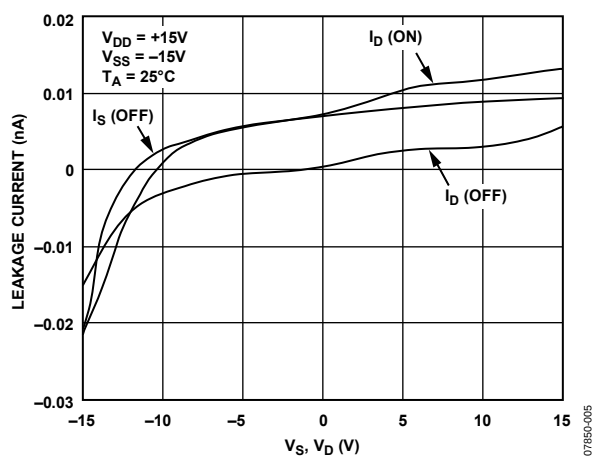
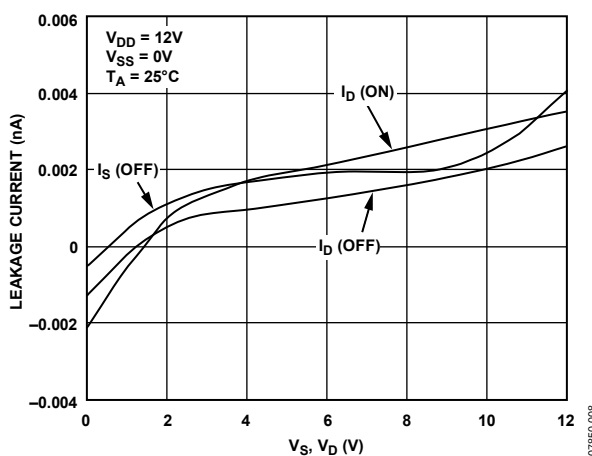
Table 4. Pin Function Description

| Pin No. | Mnemonic        | Description                                                                                                                  |
|---------|-----------------|------------------------------------------------------------------------------------------------------------------------------|
| 1       | D               | Drain terminal. May be an input or an output.                                                                                |
| 2       | S1              | Source terminal. May be an input or an output.                                                                               |
| 3       | GND             | Ground (0 V) reference.                                                                                                      |
| 4       | V <sub>DD</sub> | Most positive power supply potential.                                                                                        |
| 5       | V <sub>L</sub>  | Logic power supply (5 V).                                                                                                    |
| 6       | IN              | Logic control input.                                                                                                         |
| 7       | V <sub>SS</sub> | Most negative power supply potential in dual-supply applications. In single-supply applications, it may be connected to GND. |
| 8       | S2              | Source terminal. May be an input or an output.                                                                               |

Table 5. Truth Table

| Logic | Switch 1 | Switch 2 |
|-------|----------|----------|
| 0     | On       | Off      |
| 1     | Off      | On       |

## TYPICAL PERFORMANCE CHARACTERISTICS

Figure 3.  $R_{ON}$  as a Function of  $V_D$  ( $V_S$ ), Dual-Supply VoltageFigure 6.  $R_{ON}$  as a Function of  $V_D$  ( $V_S$ ), Single-Supply VoltageFigure 4.  $R_{ON}$  as a Function of  $V_D$  ( $V_S$ ) for Different TemperaturesFigure 7.  $R_{ON}$  as a Function of  $V_D$  ( $V_S$ ) for Different TemperaturesFigure 5. Leakage Currents as a Function of  $V_S$  ( $V_D$ )Figure 8. Leakage Currents as a Function of  $V_S$  ( $V_D$ )

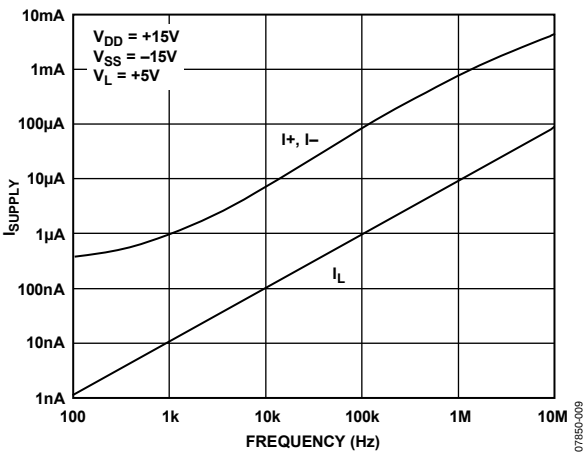


Figure 9. Supply Current ( $I_{SUPPLY}$ ) vs. Input Switching Frequency

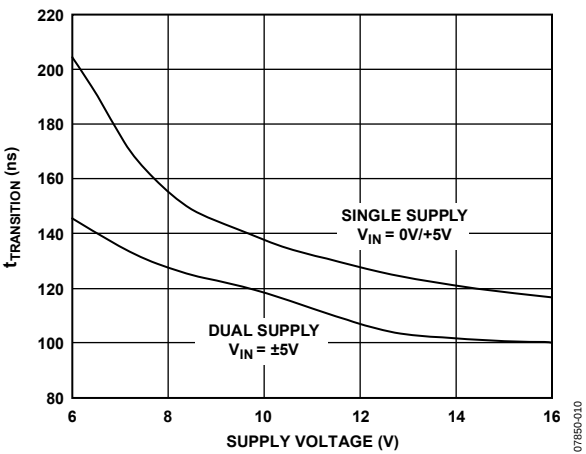


Figure 10. Transition Time ( $t_{TRANSITION}$ ) vs. Power Supply Voltage

# TEST CIRCUITS

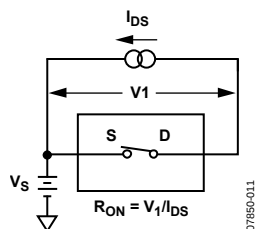


Figure 11. On Resistance

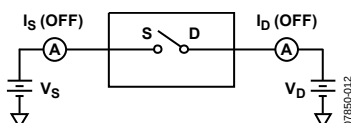


Figure 12. Off Leakage

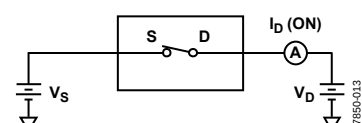


Figure 13. On Leakage

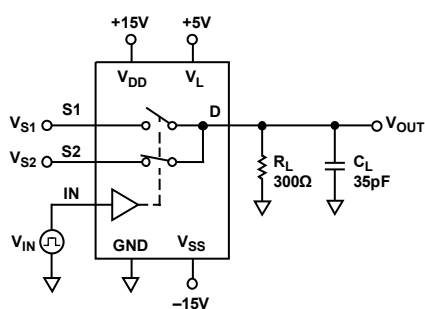


Figure 14. Transition Time,  $t_{\text{TRANSITION}}$

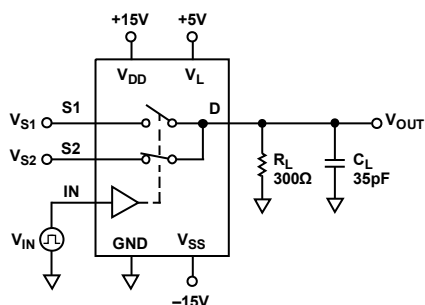
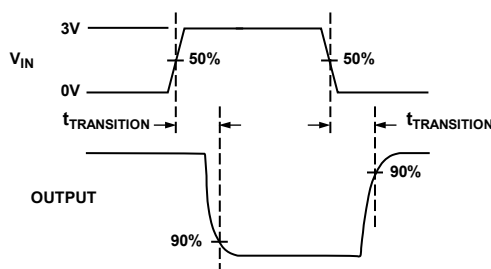
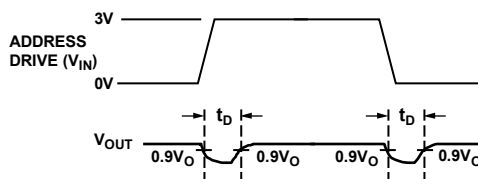


Figure 15. Break-Before-Make Time Delay,  $t_D$



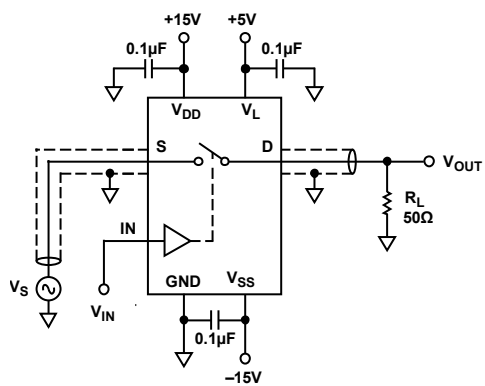
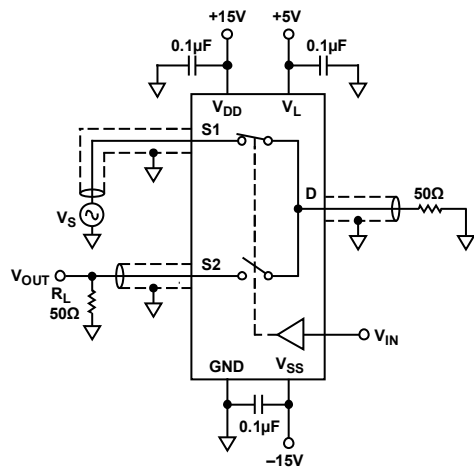


Figure 16. Off Isolation

071950-016



CHANNEL-TO-CHANNEL CROSSTALK =  $20 \times \log |V_S/V_{OUT}|$

Figure 17. Crosstalk

071950-017

## TERMINOLOGY

**V<sub>DD</sub>**

Most positive power supply potential.

**V<sub>SS</sub>**

Most negative power supply potential in dual-supply applications.  
In single-supply applications, it may be connected to GND.

**V<sub>L</sub>**

Logic power supply (5 V).

**GND**

Ground (0 V) reference.

**S**

Source terminal. May be an input or an output.

**D**

Drain terminal. May be an input or an output.

**IN**

Logic control input.

**R<sub>ON</sub>**

Ohmic resistance between D and S.

**I<sub>S</sub> (Off)**

Source leakage current with the switch off.

**I<sub>D</sub> (Off)**

Drain leakage current with the switch off.

**I<sub>D</sub>, I<sub>S</sub> (On)**

Channel leakage current with the switch on.

**V<sub>D</sub> (V<sub>S</sub>)**

Analog voltage on terminals D, S.

**C<sub>S</sub> (Off)**

Off switch source capacitance.

**C<sub>D</sub>, C<sub>S</sub> (On)**

On switch capacitance.

**t<sub>TRANSITION</sub>**

Delay time between the 50% and 90% points of the digital inputs and the switch on condition when switching from one address state to another.

**t<sub>D</sub>**

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

**V<sub>INL</sub>**

Maximum input voltage for Logic 0.

**V<sub>INH</sub>**

Minimum input voltage for Logic 1.

**I<sub>INL</sub> (I<sub>INH</sub>)**

Input current of the digital input.

**Crosstalk**

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

**Off Isolation**

A measure of unwanted signal coupling through an off channel.

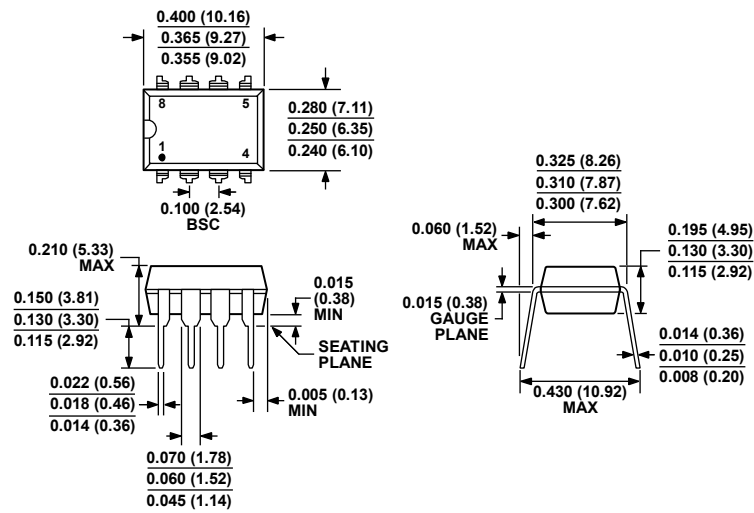
**I<sub>DD</sub>**

Positive supply current.

**I<sub>SS</sub>**

Negative supply current.

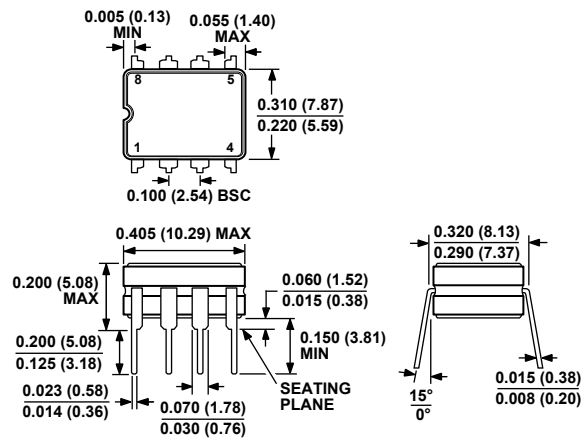
## OUTLINE DIMENSIONS



COMPLIANT TO JEDEC STANDARDS MS-001  
CONTROLLING DIMENSIONS ARE IN INCHES; MILLIMETER DIMENSIONS  
(IN PARENTHESES) ARE ROUNDED-OFF INCH EQUIVALENTS FOR  
REFERENCE ONLY AND ARE NOT APPROPRIATE FOR USE IN DESIGN.  
CORNER LEADS MAY BE CONFIGURED AS WHOLE OR HALF LEADS.

Figure 18. 8-Lead Plastic Dual In-Line Package [PDIP]  
Narrow Body  
(N-8)

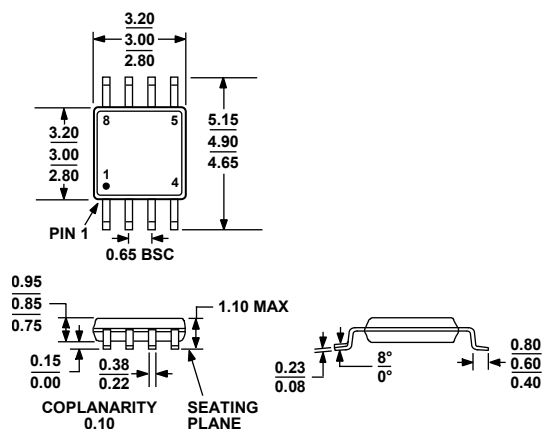
Dimensions shown in inches and (millimeters)



CONTROLLING DIMENSIONS ARE IN INCHES; MILLIMETER DIMENSIONS  
(IN PARENTHESES) ARE ROUNDED-OFF INCH EQUIVALENTS FOR  
REFERENCE ONLY AND ARE NOT APPROPRIATE FOR USE IN DESIGN.

Figure 19. 8-Lead Ceramic Dual In-Line Package [CERDIP]  
(Q-8)

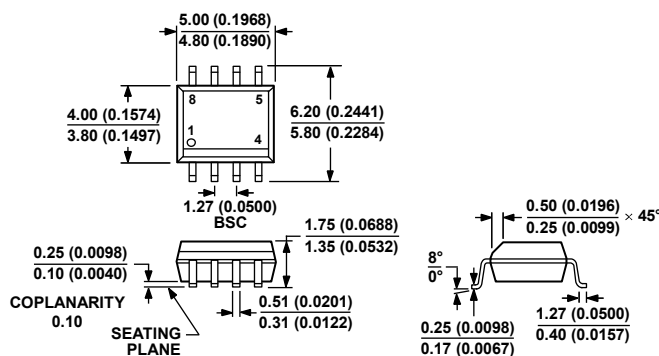
Dimensions shown in inches and (millimeters)



COMPLIANT TO JEDEC STANDARDS MO-187-AA

Figure 20. 8-Lead Mini Small Outline Package [MSOP]  
(RM-8)

Dimensions shown in millimeters



COMPLIANT TO JEDEC STANDARDS MS-012-AA

CONTROLLING DIMENSIONS ARE IN MILLIMETERS; INCH DIMENSIONS  
(IN PARENTHESES) ARE ROUNDED-OFF MILLIMETER EQUIVALENTS FOR  
REFERENCE ONLY AND ARE NOT APPROPRIATE FOR USE IN DESIGN.

Figure 21. 8-Lead Standard Small Outline Package [SOIC\_N]  
Narrow Body (R-8)

Dimensions shown in millimeters and (inches)

012407-A

## ORDERING GUIDE

| Model                         | Temperature Range | Package Description                            | Package Option | Branding |
|-------------------------------|-------------------|------------------------------------------------|----------------|----------|
| ADG419BN                      | -40°C to +125°C   | 8-Lead Plastic Dual In-Line Package [PDIP]     | N-8            |          |
| ADG419BNZ <sup>1</sup>        | -40°C to +125°C   | 8-Lead Plastic Dual In-Line Package [PDIP]     | N-8            |          |
| ADG419BR                      | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BR-REEL                 | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BR-REEL7                | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BRZ <sup>1</sup>        | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BRZ-REEL <sup>1</sup>   | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BRZ-REEL7 <sup>1</sup>  | -40°C to +125°C   | 8-Lead Standard Small Outline Package [SOIC_N] | R-8            |          |
| ADG419BRM                     | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB      |
| ADG419BRM-REEL                | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB      |
| ADG419BRM-REEL7               | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB      |
| ADG419BRMZ <sup>1</sup>       | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB#     |
| ADG419BRMZ-REEL <sup>1</sup>  | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB#     |
| ADG419BRMZ-REEL7 <sup>1</sup> | -40°C to +125°C   | 8-Lead Mini Small Outline Package [MSOP]       | RM-8           | SBB#     |
| ADG419TQ                      | -55°C to +125°C   | 8-Lead Ceramic Dual In-Line Package [CERDIP]   | Q-8            |          |

<sup>1</sup> Z = RoHS Compliant Part, # denotes that RoHS compliant part is top or bottom marked.

**ADG419**

**NOTES**

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**ADG419**

## NOTES