# PCN 15_0159

## ADG5208/ADG5209 Data Sheet Changes

## Rev. B to Rev. C

This document highlights the performance changes from the Rev. B to the Rev. C data sheet for the ADG5208 and ADG5209 Analog Multiplexers.

For full product information and changes to Typical Performance Characteristics plots please refer to the ADG5208/09 Rev. C data sheet.

1. HBM ESD

| HBM ESD | Rev B | Rev C |
|---|---|---|
| I/O Port to Supplies | 4kV | 8kV |
| I/O Port to I/O Port | 1kV | 2kV |
| All other pins | 4kV | 8kV |

2. Datasheet specification changes from Rev. B to Rev. C

Tables 1 to 4 outline a datasheet specification comparison of Rev. B to Rev. C material. The changed specifications are highlighted in red font.

# SPECIFICATION CHANGES FROM Rev. B to Rev. C

**Table 1.** $V_{DD}$ = +15 V ± 10%, $V_{SS}$ = −15 V ± 10%, GND = 0 V, unless otherwise noted.

| Parameter | Rev.B 25°C | Rev.B −40°C to +85°C | Rev.B −40°C to +125°C | Rev. C 25°C | Rev. C −40°C to +85°C | Rev. C −40°C to +125°C | Unit | Test Conditions/ Comments |
|---|---|---|---|---|---|---|---|---|
| **ANALOG SWITCH** | | | | | | | | |
| Analog Signal Range | | | $V_{DD}$ to $V_{SS}$ | | | $V_{DD}$ to $V_{SS}$ | V | |
| On Resistance, $R_{ON}$ | 160 | | | 160 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 200 | | 250 280 | 200 | | 250 280 | Ω max | $V_{DD}$ = +13.5 V, $V_{SS}$ = −13.5 V |
| On-Resistance Match Between Channels, $\Delta R_{ON}$ | 3.5 | | | 3.5 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 8 | 9 | 10 | 8 | 9 | 10 | Ω max | |
| On-Resistance Flatness, $R_{FLAT (ON)}$ | 40 | | | 40 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 50 | 65 | 70 | 50 | 65 | 70 | Ω max | |
| **LEAKAGE CURRENTS** | | | | | | | | $V_{DD}$ = +16.5 V, $V_{SS}$ = −16.5 V |
| Source Off Leakage, $I_S$ (Off) | ±0.00 5 | | | ±0.00 5 | | | nA typ | $V_S$ = ±10 V, $V_D$ = ±10 V |
| | ±0.1 | ±0.2 | ±0.4 | ±0.1 | ±0.2 | ±0.4 | nA max | |
| Drain Off Leakage, $I_D$ (Off) | ±0.00 5 | | | ±0.00 5 | | | nA typ | $V_S$ = ±10 V, $V_D$ = ±10 V |
| | ±0.1 | ±0.4 | ±1.4 | ±0.1 | ±0.4 | ±1.4 | nA max | |
| Channel On Leakage, $I_D$ (On), $I_S$ (On) | ±0.01 | | | ±0.01 | | | nA typ | ± $V_S$ = $V_D$ = ±10 V |
| | ±0.2 | ±0.5 | ±1.4 | ±0.2 | ±0.5 | ±1.4 | nA max | |
| **DIGITAL INPUTS** | | | | | | | | |
| Input High Voltage, $V_{INH}$ | | | 2 | | | 2 | V min | |
| Input Low Voltage, $V_{INL}$ | | | 0.8 | | | 0.8 | V max | |
| Input Current, $I_{INL}$ or $I_{INH}$ | 0.002 | | | 0.002 | | | µA typ | $V_{IN}$ = $V_{GND}$ or $V_{DD}$ |
| | | | ±0.1 | | | ±0.1 | µA max | |
| Digital Input Capacitance, $C_{IN}$ | 3 | | | 3 | | | pF typ | |
| **Dynamic Characteristics**[1] | | | | | | | | |
| Transition Time, $t_{TRANSITION}$ | 170 | | | 150 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 205 | 245 | 275 | 180 | 210 | 245 | ns max | $V_S$ = 10 V |
| $t_{ON}$ (EN) | 145 | | | 125 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 185 | 220 | 245 | 150 | 185 | 215 | ns max | $V_S$ = 10 V |
| $t_{OFF}$ (EN) | 120 | | | 160 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 145 | 165 | 180 | 185 | 210 | 230 | ns max | $V_S$ = 10 V |
| Break-Before-Make Time Delay, $t_D$ | 65 | | | 55 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | | | 30 | | | 25 | ns min | $V_{S1}$ = $V_{S2}$ = 10 V |
| Charge Injection, $Q_{INJ}$ | 0.4 | | | 0.2 | | | pC typ | $V_S$ = 0 V, $R_S$ = 0 Ω, $C_L$ = 1 nF |
| Off Isolation | −90 | | | −86 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| Channel-to-Channel Crosstalk | −90 | | | −80 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| −3 dB Bandwidth | | | | | | | | $R_L$ = 50 Ω, $C_L$ = 5 pF |
| ADG5208 | 54 | | | 110 | | | MHz typ | |
| ADG5209 | 133 | | | 240 | | | MHz typ | |
| Insertion Loss | −6.4 | | | −6.4 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| $C_S$ (Off) | 5.5 | | | 2.9 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (Off) | | | | | | | | |
| ADG5208 | 52 | | | 34 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 26 | | | 17 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (On), $C_S$ (On) | | | | | | | | |
| ADG5208 | 58 | | | 37 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 31 | | | 21 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| **POWER REQUIREMENTS** | | | | | | | | $V_{DD}$ = +16.5 V, $V_{SS}$ = −16.5 V |
| $I_{DD}$ | 45 | | | 45 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | 55 | | 70 | 55 | | 70 | µA max | |
| $I_{SS}$ | 0.001 | | | 0.001 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | | | 1 | | | 1 | µA max | |
| $V_{DD}/V_{SS}$ | | | ±9/±22 | | | ±9/±22 | V min/V max | GND = 0 V |

1 Guaranteed by design, not subject to production test.

**Table 2.** $V_{DD}$ = +20V ± 10%, $V_{SS}$ = −20 V ± 10%, GND = 0 V, unless otherwise noted.

| Parameter | Rev.B 25°C | Rev.B −40°C to +85°C | Rev.B −40°C to +125°C | Rev. C 25°C | Rev. C −40°C to +85°C | Rev. C −40°C to +125°C | Unit | Test Conditions/ Comments |
|---|---|---|---|---|---|---|---|---|
| **ANALOG SWITCH** | | | | | | | | |
| Analog Signal Range | | | $V_{DD}$ to $V_{SS}$ | | | $V_{DD}$ to $V_{SS}$ | V | |
| On Resistance, $R_{ON}$ | 140 | | | 140 | | | Ω typ | $V_S$ = ±15 V, $I_S$ = −1 mA |
| | 160 | 200 | 230 | 160 | 200 | 230 | Ω max | $V_{DD}$ = +18 V, $V_{SS}$ = −18 V |
| On-Resistance Match Between Channels, $\Delta R_{ON}$ | 3.5 | | | 3.5 | | | Ω typ | $V_S$ = ±15 V, $I_S$ = −1 mA |
| | 8 | 9 | 10 | 8 | 9 | 10 | Ω max | |
| On-Resistance Flatness, $R_{FLAT (ON)}$ | 34 | | | 34 | | | Ω typ | $V_S$ = ±15 V, $I_S$ = −1 mA |
| | 45 | 55 | 60 | 45 | 55 | 60 | Ω max | |
| **LEAKAGE CURRENTS** | | | | | | | | $V_{DD}$ = +22 V, $V_{SS}$ = −22 V |
| Source Off Leakage, $I_S$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_S$ = ±15 V, $V_D$ = ±15 V |
| | ±0.1 | ±0.2 | ±0.4 | ±0.1 | ±0.2 | ±0.4 | nA max | |
| Drain Off Leakage, $I_D$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_S$ = ±15 V, $V_D$ = ±15 V |
| | ±0.1 | ±0.4 | ±1.4 | ±0.1 | ±0.4 | ±1.4 | nA max | |
| Channel On Leakage, $I_D$ (On), $I_S$ (On) | ±0.01 | | | ±0.01 | | | nA typ | ± $V_S$ = $V_D$ = ±15 V |
| | ±0.2 | ±0.5 | ±1.4 | ±0.2 | ±0.5 | ±1.4 | nA max | |
| **DIGITAL INPUTS** | | | | | | | | |
| Input High Voltage, $V_{INH}$ | | | 2 | | | 2 | V min | |
| Input Low Voltage, $V_{INL}$ | | | 0.8 | | | 0.8 | V max | |
| Input Current, $I_{INL}$ or $I_{INH}$ | 0.002 | | | 0.002 | | | µA typ | $V_{IN}$ = $V_{GND}$ or $V_{DD}$ |
| | | | ±0.1 | | | ±0.1 | µA max | |
| Digital Input Capacitance, $C_{IN}$ | 3 | | | 3 | | | pF typ | |
| **DYNAMIC CHARACTERISTICS**[1] | | | | | | | | |
| Transition Time, $t_{TRANSITION}$ | 160 | | | 140 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 195 | 225 | 255 | 170 | 195 | 220 | ns max | $V_S$ = 10 V |
| $t_{ON}$ (EN) | 145 | | | 120 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 170 | 200 | 225 | 140 | 170 | 195 | ns max | $V_S$ = 10 V |
| $t_{OFF}$ (EN) | 120 | | | 160 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 140 | 155 | 170 | 185 | 205 | 220 | ns max | $V_S$ = 10 V |
| Break-Before-Make Time Delay, $t_D$ | 55 | | | 45 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | | | 30 | | | 20 | ns min | $V_{S1}$ = $V_{S2}$ = 10 V |
| Charge Injection, $Q_{INJ}$ | 0.3 | | | 0.4 | | | pC typ | $V_S$ = 0 V, $R_S$ = 0 Ω, $C_L$ = 1 nF |
| Off Isolation | −90 | | | −86 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| Channel-to-Channel Crosstalk | −90 | | | −80 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| −3 dB Bandwidth | | | | | | | | $R_L$ = 50 Ω, $C_L$ = 5 pF |
| ADG5208 | 60 | | | 121 | | | MHz typ | |
| ADG5209 | 130 | | | 255 | | | MHz typ | |
| Insertion Loss | −5.6 | | | −5.6 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz; see |
| $C_S$ (Off) | 5.5 | | | 2.8 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (Off) | | | | | | | | |
| ADG5208 | 51 | | | 33 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 26 | | | 17 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (On), $C_S$ (On) | | | | | | | | |
| ADG5208 | 57 | | | 36 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 31 | | | 21 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| **POWER REQUIREMENTS** | | | | | | | | $V_{DD}$ = +22 V, $V_{SS}$ = -22 V |
| $I_{DD}$ | 50 | | | 50 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | 70 | | 110 | 70 | | 110 | µA max | |
| $I_{SS}$ | 0.001 | | | 0.001 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | | | 1 | | | 1 | µA max | |
| $V_{DD}/V_{SS}$ | | | ±9/±22 | | | ±9/±22 | V min/V max | GND = 0 V |

1 Guaranteed by design, not subject to production test.

**Table 3.** $V_{DD}$ = +12V ± 10%, $V_{SS}$ = 0V GND = 0 V, unless otherwise noted.

| Parameter | Rev.B 25°C | Rev.B −40°C to +85°C | Rev.B −40°C to +125°C | Rev. C 25°C | Rev. C −40°C to +85°C | Rev. C −40°C to +125°C | Unit | Test Conditions/ Comments |
|---|---|---|---|---|---|---|---|---|
| **ANALOG SWITCH** | | | | | | | | |
| Analog Signal Range | | | 0 V to $V_{DD}$ | | | 0 V to $V_{DD}$ | V | |
| On Resistance, $R_{ON}$ | 350 | | | 350 | | | Ω typ | $V_S$ = 0 V to 10V, $I_S$ = −1 mA |
| | 500 | 610 | 700 | 500 | 610 | 700 | Ω max | $V_{DD}$ = +10.8V, $V_{SS}$ = 0 V |
| On-Resistance Match Between Channels, $\Delta R_{ON}$ | 5 | | | 5 | | | Ω typ | $V_S$ = 0 V to 10V, $I_s$ = −1 mA |
| | 20 | 22 | 24 | 20 | 22 | 24 | Ω max | |
| On-Resistance Flatness, $R_{FLAT (ON)}$ | 160 | | | 160 | | | Ω typ | $V_S$ = 0 V to 10V, $I_S$ = −1 mA |
| | 280 | 335 | 370 | 280 | 335 | 370 | Ω max | |
| **LEAKAGE CURRENTS** | | | | | | | | |
| Source Off Leakage, $I_S$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_{DD}$ = 13.2 V, $V_{SS}$ = 0V $V_s$ = 1V/10V, $V_D$ = +10 V/1V |
| | ±0.1 | ±0.2 | ±0.4 | ±0.1 | ±0.2 | ±0.4 | nA max | |
| Drain Off Leakage, $I_D$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_s$ = 1V/10V, $V_D$ = +10 V/1V |
| | ±0.1 | ±0.4 | ±1.4 | ±0.1 | ±0.4 | ±1.4 | nA max | |
| Channel On Leakage, $I_D$ (On ), $I_S$ (On) | ±0.01 | | | ±0.01 | | | nA typ | ± $V_S$ = $V_D$ = 1 V/10V |
| | ±0.2 | ±0.5 | ±1.4 | ±0.2 | ±0.5 | ±1.4 | nA max | |
| **DIGITAL INPUTS** | | | | | | | | |
| Input High Voltage, $V_{INH}$ | | | 2 | | | 2 | V min | |
| Input Low Voltage, $V_{INL}$ | | | 0.8 | | | 0.8 | V max | |
| Input Current, $I_{INL}$ or $I_{INH}$ | 0.002 | | | 0.002 | | | µA typ | $V_{IN}$ = $V_{GND}$ or $V_{DD}$ |
| | | | ±0.1 | | | ±0.1 | µA max | |
| Digital Input Capacitance, $C_{IN}$ | 3 | | | 3 | | | pF typ | |
| **DYNAMIC CHARACTERISTICS[1]** | | | | | | | | |
| Transition Time, $t_{TRANSITION}$ | 210 | | | 200 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 270 | 330 | 380 | 250 | 295 | 335 | ns max | $V_S$ = 8 V |
| $t_{ON}$ (EN) | 215 | | | 180 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 275 | 345 | 400 | 225 | 280 | 320 | ns max | $V_S$ = 8 V |
| $t_{OFF}$ (EN) | 115 | | | 165 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 140 | 160 | 175 | 200 | 225 | 245 | ns max | $V_S$ = 8 V |
| Break-Before-Make Time Delay, $t_D$ | 135 | | 70 | 95 | | 50 | ns typ<br>ns min | $R_L$ = 300 Ω, $C_L$ = 35 pF $V_{S1}$ = $V_{S2}$ = 8 V |
| Charge Injection, $Q_{INJ}$ | 0.3 | | | 0.2 | | | pC typ | $V_S$ = 6 V, $R_S$ = 0 Ω, $C_L$ = 1 nF |
| Off Isolation | −90 | | | −86 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| Channel-to-Channel Crosstalk | −90 | | | −80 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| −3 dB Bandwidth | | | | | | | | $R_L$ = 50 Ω, $C_L$ = 5 pF |
| ADG5208 | 60 | | | 95 | | | MHz typ | |
| ADG5209 | 120 | | | 180 | | | MHz typ | |
| Insertion Loss | −8.8 | | | −8.9 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz; see |
| $C_S$ (Off) | 6 | | | 3.3 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (Off) | | | | | | | | |
| ADG5208 | 56 | | | 38 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 28 | | | 19 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (On), $C_S$ (On) | | | | | | | | |
| ADG5208 | 63 | | | 41 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 35 | | | 24 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| **POWER REQUIREMENTS** | | | | | | | | $V_{DD}$ = 13.2 |
| $I_{DD}$ | 40 | | | 40 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | 50 | | 65 | 50 | | 65 | µA max | |
| $V_{DD}$ | | | 9/40 | | | 9/40 | V min/V max | GND = 0 V, Vss=0V |

1 Guaranteed by design, not subject to production test.

**Table 4.** $V_{DD}$ = +36V ± 10%, $V_{SS}$ = 0V GND = 0 V, unless otherwise noted.

| Parameter | Rev.B 25°C | Rev.B −40°C to +85°C | Rev.B −40°C to +125°C | Rev. C 25°C | Rev. C −40°C to +85°C | Rev. C −40°C to +125°C | Unit | Test Conditions/ Comments |
|---|---|---|---|---|---|---|---|---|
| **ANALOG SWITCH** | | | | | | | | |
| Analog Signal Range | | | 0 V to $V_{DD}$ | | | 0 V to $V_{DD}$ | V | |
| On Resistance, $R_{ON}$ | 150 | | | 150 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 170 | 215 | 245 | 170 | 215 | 245 | Ω max | $V_{DD}$ = +13.5 V, $V_{SS}$ = −13.5 V |
| On-Resistance Match Between Channels, $\Delta R_{ON}$ | 3.5 | | | 3.5 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 8 | 9 | 10 | 8 | 9 | 10 | Ω max | |
| On-Resistance Flatness, $R_{FLAT (ON)}$ | 35 | | | 35 | | | Ω typ | $V_S$ = ±10 V, $I_S$ = −1 mA |
| | 55 | 65 | 70 | 55 | 65 | 70 | Ω max | |
| **LEAKAGE CURRENTS** | | | | | | | | $V_{DD}$ = +16.5 V, $V_{SS}$ = −16.5 V |
| Source Off Leakage, $I_S$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_S$ = ±10 V, $V_D$ = ±10 V |
| | ±0.1 | ±0.2 | ±0.4 | ±0.1 | ±0.2 | ±0.4 | nA max | |
| Drain Off Leakage, $I_D$ (Off) | ±0.005 | | | ±0.005 | | | nA typ | $V_S$ = ±10 V, $V_D$ = ±10 V |
| | ±0.1 | ±0.4 | ±1.4 | ±0.1 | ±0.4 | ±1.4 | nA max | |
| Channel On Leakage, $I_D$ (On), $I_S$ (On) | ±0.01 | | | ±0.01 | | | nA typ | $V_S$ = $V_D$ = ±10 V; |
| | ±0.2 | ±0.5 | ±1.4 | ±0.2 | ±0.5 | ±1.4 | nA max | |
| **DIGITAL INPUTS** | | | | | | | | |
| Input High Voltage, $V_{INH}$ | | | 2 | | | 2 | V min | |
| Input Low Voltage, $V_{INL}$ | | | 0.8 | | | 0.8 | V max | |
| Input Current, $I_{INL}$ or $I_{INH}$ | 0.002 | | | 0.002 | | | µA typ | $V_{IN}$ = $V_{GND}$ or $V_{DD}$ |
| | | | ±0.1 | | | ±0.1 | µA max | |
| Digital Input Capacitance, $C_{IN}$ | 3 | | | 3 | | | pF typ | |
| **DYNAMIC CHARACTERISTICS**[1] | | | | | | | | |
| Transition Time, $t_{TRANSITION}$ | 185 | | | 170 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 230 | 245 | 259 | 205 | 225 | 235 | ns max | $V_S$ = 10 V |
| $t_{ON}$ (EN) | 170 | | | 150 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 210 | 230 | 255 | 180 | 195 | 215 | ns max | $V_S$ = 10 V |
| $t_{OFF}$ (EN) | 125 | | | 180 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | 180 | 180 | 180 | 225 | 225 | 230 | ns max | $V_S$ = 10 V |
| Break-Before-Make Time Delay, $t_D$ | 70 | | | 55 | | | ns typ | $R_L$ = 300 Ω, $C_L$ = 35 pF |
| | | | 35 | | | 25 | ns min | $V_{S1}$ = $V_{S2}$ = 10 V |
| Charge Injection, $Q_{INJ}$ | 0.4 | | | 0.3 | | | pC typ | $V_S$ = 0 V, $R_S$ = 0 Ω, $C_L$ = 1 nF |
| Off Isolation | −90 | | | −86 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| Channel-to-Channel Crosstalk | −90 | | | −80 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz |
| −3 dB Bandwidth | | | | | | | | $R_L$ = 50 Ω, $C_L$ = 5 pF |
| ADG5208 | 65 | | | 105 | | | MHz typ | |
| ADG5209 | 130 | | | 195 | | | MHz typ | |
| Insertion Loss | −6 | | | −6.2 | | | dB typ | $R_L$ = 50 Ω, $C_L$ = 5 pF, f = 1 MHz; see |
| $C_S$ (Off) | 5.5 | | | 2.7 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (Off) | | | | | | | | |
| ADG5208 | 51 | | | 32 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 25 | | | 16 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| $C_D$ (On), $C_S$ (On) | | | | | | | | |
| ADG5208 | 57 | | | 35 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| ADG5209 | 32 | | | 20 | | | pF typ | $V_S$ = 0 V, f = 1 MHz |
| **POWER REQUIREMENTS** | | | | | | | | $V_{DD}$ = +16.5 V, $V_{SS}$ = −16.5 V |
| $I_{DD}$ | 80 | | | 80 | | | µA typ | Digital inputs = 0 V or $V_{DD}$ |
| | 100 | | 130 | 100 | | 130 | µA max | |
| $V_{DD}$ | | | 9/40 | | | 9/40 | V min/V max | GND = 0 V, Vss=0V |

1 Guaranteed by design, not subject to production test.