



Low Capacitance, Low Charge Injection, ±15 V/+12 V *i*CMOS Quad SPST Switches

ADG1211/ADG1212/ADG1213

SPECIFICATIONS

DUAL SUPPLY

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

Table 1.

| Parameter | FROM -40°C to +85°C | | | TO -40°C to +85°C | | | Unit | Test Conditions/Comments |
|--------------------------------------|------------------------------|----------------|--------|----------------------------|----------------|--------|--------|--|
| | 25°C | -40°C to +85°C | +125°C | 25°C | -40°C to +85°C | +125°C | | |
| DYNAMIC CHARACTERISTICS ¹ | | | | | | | | |
| t_{ON} | 105 | | | 110 | | | ns typ | $R_L = 300 \Omega$, $C_L = 35 \text{ pF}$ |
| | 125 | 160 | 185 | 130 | 160 | 195 | ns max | $V_S = 10 \text{ V}$; see Figure 23 |
| t_{OFF} | 40 | | | 85 | | | ns typ | $R_L = 300 \Omega$, $C_L = 35 \text{ pF}$ |
| | 50 | 60 | 60 | 115 | 130 | 150 | ns max | $V_S = 10 \text{ V}$; see Figure 23 |

SINGLE SUPPLY

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

Table 2.

| Parameter | FROM -40°C to +85°C | | | TO -40°C to +85°C | | | Unit | Test Conditions/Comments |
|--------------------------------------|------------------------------|----------------|--------|----------------------------|----------------|--------|--------|--|
| | 25°C | -40°C to +85°C | +125°C | 25°C | -40°C to +85°C | +125°C | | |
| DYNAMIC CHARACTERISTICS ¹ | | | | | | | | |
| t_{ON} | 120 | | | 130 | | | ns typ | $R_L = 300 \Omega$, $C_L = 35 \text{ pF}$ |
| | 155 | 190 | 225 | 170 | 210 | 240 | ns max | $V_S = 8 \text{ V}$; see Figure 23 |
| t_{OFF} | 45 | | | 95 | | | ns typ | $R_L = 300 \Omega$, $C_L = 35 \text{ pF}$ |
| | 65 | 75 | 85 | 120 | 145 | 180 | ns max | $V_S = 8 \text{ V}$; see Figure 23 |

¹ Guaranteed by design, not subject to production test.