



ADG601/ADG602/ADG619/ ADG621 Data Sheet Specifications Revision

Data Sheet Comparison

ADG601/ADG602

±5 V Dual Supply

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

Table 1.

Parameter	REV. D		REV. E		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		V_{SS} to V_{DD}		V_{SS} to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = -4.5\text{ V}$
On Resistance (R_{ON})	2		2		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$; see Figure 15
	2.5	5.5	3.3	5.5	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.35	0.4	0.35	0.4	Ω typ	$V_S = \pm 3.3\text{ V}$, $I_{DS} = -10\text{ mA}$
	0.6	0.65	0.75	0.80	Ω max	

+5 V Single Supply

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

Table 2.

Parameter	REV. D		REV. E		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		0 to V_{DD}		0 to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = 0\text{ V}$
On Resistance (R_{ON})	3.5		3.5		Ω typ	$V_S = 0\text{ V}$ to 4.5 V , $I_{DS} = -10\text{ mA}$; see Figure 15
	5	8	5.5	8	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.2	0.2	0.2	0.2	Ω typ	$V_S = 1.5\text{ V}$ to 3.3 V , $I_{DS} = -10\text{ mA}$
		0.6		0.75	Ω max	

Data Sheet Comparison

ADG619

±5 V Dual Supply

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

Table 1.

Parameter	REV. C		REV. D		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		V_{SS} to V_{DD}		V_{SS} to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = -4.5\text{ V}$
On Resistance (R_{ON})	4		4		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$; see Figure 15
	6.5	8.5	6.6	8.6	Ω max	
R_{ON} Match Between Channels (ΔR_{ON})	0.7		0.7		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$
	1.1	1.35	1.2	1.45	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.7	0.8	0.7	0.8	Ω typ	$V_S = \pm 3.3\text{ V}$, $I_{DS} = -10\text{ mA}$
	1.35	1.4	1.5	1.6	Ω max	

+5 V Single Supply

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

Table 2.

Parameter	REV. C		REV. D		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		0 to V_{DD}		0 to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = -4.5\text{ V}$
On Resistance (R_{ON})	7		7		Ω typ	$V_S = 0\text{ V}$ to 4.5 V , $I_{DS} = -10\text{ mA}$; see Figure 15
	10	12.5	11	13.5	Ω max	
R_{ON} Match Between Channels (ΔR_{ON})	0.8		0.8		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$
	1.1	1.3	1.2	1.45	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.5	0.5	0.5	0.5	Ω typ	$V_S = 1.5\text{ V}$ to 3.3 V , $I_{DS} = -10\text{ mA}$
		1.2		1.5	Ω max	

Data Sheet Comparison

ADG621

±5 V Dual Supply

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

Table 1.

Parameter	REV. C		REV. D		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		V_{SS} to V_{DD}		V_{SS} to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = -4.5\text{ V}$
On Resistance(R_{ON})	4		4		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$; see Figure 15
	5.5	7	6.6	8.6	Ω max	
R_{ON} Match Between Channels (ΔR_{ON})	0.25		0.25		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$
	0.35	0.4	0.55	0.6	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.9	0.9	0.9	0.9	Ω typ	$V_S = \pm 3.3\text{ V}$, $I_{DS} = -10\text{ mA}$
		1.5		1.6	Ω max	

+5 V Single Supply

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

Table 2.

Parameter	REV. C		REV. D		Unit	Test Conditions/Comments
	25°C	-40°C to +85°C	25°C	-40°C to +85°C		
ANALOG SWITCH						
Analog Signal Range		0 to V_{DD}		0 to V_{DD}	V	$V_{DD} = +4.5\text{ V}$, $V_{SS} = -4.5\text{ V}$
On Resistance(R_{ON})	7		7		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$; see Figure 15
	10	12.5	11	13.5	Ω max	
R_{ON} Match Between Channels (ΔR_{ON})	0.5		0.5		Ω typ	$V_S = \pm 4.5\text{ V}$, $I_{DS} = -10\text{ mA}$
	0.75	1	0.85	1.1	Ω max	
On-Resistance Flatness ($R_{FLAT(ON)}$)	0.5	0.5	0.5	0.5	Ω typ	$V_S = \pm 3.3\text{ V}$, $I_{DS} = -10\text{ mA}$
		1.2		1.5	Ω max	