PCN_20_0174

ADG811, ADG812, ADG836, ADG836L and ADG804 Specification Limit Changes

PCN 20_0174 Data sheet

This document highlights the performance changes of Ron Max Specifications from the following:

- Rev. C to PCN 20_0174 data sheet for the ADG811/ADG812 Quad SPST Switches
- Rev. B to PCN 20_0174 datasheet for the ADG836 Dual SPDT
- Rev. B to PCN 20_0174 datasheet for the ADG836L Dual SPDT
- Rev. A to PCN 20_0174 datasheet for the ADG804 4-Channel Multiplexer

For full product information and changes to Ron Max Specifications please refer to the ADG811/ADG812 Rev. C, ADG836 Rev. B, ADG836L Rev. B, and ADG804 Rev. A data sheets.

Tables below outlines the datasheet Ron Max specification comparison of the covered generics to PCN 20_0174 data sheet:

- ADG811/ADG812, ADG836, ADG836L, and ADG804
 - Supplies: 2.7V to 3.6V, 2.5V, and 1.65V to 1.95V
 - Temperature Range: 25°C, 85°C, and 125°C

The changed specifications are highlighted in red font.

ADG811/ADG812 Rev. C to PCN 20_0174 Data sheet

ADG811/ADG812 Rev. C data sheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 1.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance, R _{ON}	0.5			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA; see Figure 20
	0.65	0.75	0.8	Ωmax	
On-Resistance Match Between Channels, ΔR _{ON}	0.04			Ωtyp	$V_{\text{DD}} = 2.7 \text{ V}, V_{\text{S}} = 0.5 \text{ V}, I_{\text{S}} = 10 \text{ mA}$
		0.075	0.08	Ωmax	
On-Resistance Flatness, R _{FLAT (ON)}	0.1			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
		0.15	0.16	Ωmax	

PCN 20_0174 data sheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted. Temperature range for the Y version is -40°C to +125°C.

Table 1.									
Parameter	+25°C	–40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments				
ANALOG SWITCH									
Analog Signal Range			$0 V to V_{DD}$	v					
On Resistance, R _{ON}	0.5			Ω typ	V_{DD} = 2.7 V, Vs = 0 V to V_{DD} , Is = 10 mA; see Error! Reference source not found.				
	0.75	0.85	0.9	Ωmax					
On-Resistance Match Between Channels, ΔR_{ON}	0.04			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0.5 V, I_{S} = 10 mA				
	0.095	0.095	0.1	Ωmax					
On-Resistance Flatness, $R_{FLAT (ON)}$	0.1			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0 V to $V_{\text{DD}},$ I_{\text{S}} = 10 mA				
	0.18	0.18	0.19	Ωmax					

ADG811/ADG812 Rev. C datasheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

1 aut 2.					
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance, R _{ON}	0.65			Ω typ	$\label{eq:VDD} V_{\text{DD}} = 2.3 \text{ V}, V_{\text{S}} = 0 \text{ V to } V_{\text{DD}}, I_{\text{S}} = 10 \text{ mA};$ see Figure 20
	0.72	0.8	0.88	Ωmax	
On-Resistance Match Between Channels, ΔR _{oN}	0.04			Ω typ	$V_{\text{DD}} = 2.3 \text{ V}, V_{\text{S}} = 0.55 \text{ V}, I_{\text{S}} = 10 \text{ mA}$
		0.08	0.085	Ωmax	
On-Resistance Flatness, RFLAT (ON)	0.16			Ωtyp	$V_{DD} = 2.3 V$, $V_S = 0 V$ to V_{DD} , $I_S = 10 mA$
		0.23	0.24	Ωmax	

Table 2.

PCN 20_0174 data sheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	v	
On Resistance, R _{ON}	0.65			Ω typ	V_{DD} = 2.3 V, V_S = 0 V to V_{DD} , I_S = 10 mA; see Error! Reference source not found.
	0.84	0.92	1.0	Ωmax	
On-Resistance Match Between Channels, ΔR_{ON}	0.04			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0.55 V, I_{S} = 10 mA
	0.1	0.1	0.105	Ωmax	
On-Resistance Flatness, R _{FLAT (ON)}	0.16			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
	0.25	0.25	0.26	Ωmax	

ADG811/ADG812 Rev. C datasheet

 V_{DD} = 1.65 V to 1.95 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Tuble 5.					
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance, Ron	1			Ω typ	$\label{eq:VDD} \begin{split} V_{\text{DD}} &= 1.8 \text{ V}, V_{\text{S}} = 0 \text{ V to } V_{\text{DD}}, I_{\text{S}} = 10 \text{ mA}; \\ \text{see Figure 20} \end{split}$
	1.4	2.2	2.2	Ωmax	
	2.5	4	4	Ωmax	$V_{DD} = 1.65 V$, $V_S = 0 V$ to V_{DD} , $I_S = 10 mA$
On-Resistance Match Between Channels, ΔR _{ON}	0.1			Ω typ	$V_{\text{DD}} = 1.65 \text{ V}, V_{\text{S}} = 0.7 \text{ V}, I_{\text{S}} = 10 \text{ mA}$

Table 3.

PCN 20_0174 data sheet

 V_{DD} = 1.65 V to 1.95 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 3.					
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{\text{DD}}$	v	
On Resistance, R _{ON}	1			Ω typ	V _{DD} = 1.8 V, V _S = 0 V to V _{DD} , I _S = 10 mA; see Error! Reference source not found.
	1.6	2.4	2.4	Ωmax	
	2.7	4.2	4.2	Ωmax	V_{DD} = 1.65 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
On-Resistance Match Between Channels, $$\Delta R_{\text{ON}}$$	0.1			Ωtyp	V _{DD} = 1.65 V, V _S = 0.7 V, I _S = 10 mA

ADG836 Rev. B to PCN 20_0174 Data sheet

ADG836 Rev. B datasheet

 $V_{DD} = 2.7$ V to 3.6 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40° C to $+125^{\circ}$ C.

Table 1.					
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (R _{ON})	0.5			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0 V to V_{DD} , I_{S} = 100 mA; Figure 19
	0.65	0.75	0.8	Ωmax	
On-Resistance Match Between	0.04			Ωtyp	$V_{DD} = 2.7 V$, $V_s = 0.65 V$, $I_s = 100 mA$
Channels (ΔR _{ON})		0.075	0.08	Ωmax	
On-Resistance Flatness (R _{FLAT (ON)})	0.1			Ωtyp	$V_{DD} = 2.7 \text{ V}, V_S = 0 \text{ V to } V_{DD}$
		0.15	0.16	Ωmax	$I_s = 100 \text{ mA}$

PCN 20_0174 data sheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted. Temperature range for the Y version is -40°C to +125°C.

Table 4.

Parameter	+25°C	–40°C to +85°C	–40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance (R _{ON})	0.5			Ω typ	V _{DD} = 2.7 V, V _S = 0 V to V _{DD} , I _S = 100 mA; Error! Reference source not found.19
	0.75	0.85	0.9	Ωmax	
On-Resistance Match Between Channels (ΔR_{ON})	0.04			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0.5 V, I_{S} = 100 mA
	0.095	0.095	0.1	Ωmax	
On-Resistance Flatness (R _{FLAT (ON)})	0.1			Ω typ	V_{DD} = 2.7 V, V_S = 0 V to V_{DD} ,
	0.18	0.18	0.19	Ωmax	Is = 100 mA

ADG836 Rev. B datasheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 2.					
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (Ron)	0.65			Ωtyp	$V_{DD} = 2.3 V$, $V_S = 0 V$ to V_{DD} , $I_S = 100 m$ A; Figure 19
	0.72	0.8	0.88	Ωmax	
On-Resistance Match Between	0.04			Ωtyp	$V_{DD} = 2.3 V$, $V_{S} = 0.7 V$, $I_{S} = 100 \text{ mA}$
Channels (ΔR _{ON})		0.08	0.085	Ωmax	
On-Resistance Flatness (R _{FLAT (ON)})	0.16			Ωtyp	$V_{DD} = 2.3 \text{ V}, V_S = 0 \text{ V}$ to V_{DD} , $I_S = 100 \text{ mA}$
		0.23	0.24	Ωmax	

Table 2.

PCN 20_0174 data sheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 5.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance $R(_{ON})$	0.65			Ω typ	V _{DD} = 2.3 V, V _S = 0 V to V _{DD} , I _S = 100 mA; Error! Reference source not found.19
	0.84	0.92	1.0	Ωmax	
On-Resistance Match Between Channels (ΔR_{ON})	0.04			Ωtyp	V _{DD} = 2.3 V, V _s = 0.55 V, I _s = 100 mA
	0.1	0.1	0.105	Ωmax	
On-Resistance Flatness ($R_{FLAT (ON)}$)	0.16			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0 V to V_{DD} , I_{S} = 100 mA
	0.25	0.25	0.26	Ωmax	

ADG836 Rev. B datasheet

 V_{DD} = 1.65 V ± 1.95 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (R _{ON})	1			Ω typ	V_{DD} = 1.8 V, V_{S} = 0 V to V_{DD} , I_{S} = 100 mA; Figure 19
	1.4	2.2	2.2	Ωmax	
	2	4	4	Ωmax	$V_{DD} = 1.65 V$, $V_S = 0 V$ to V_{DD} , $I_S = 100 mA$; Figure 19
On-Resistance Match Between	0.1			Ω typ	$V_{DD} = 1.65 \text{ V}, V_S = 0.7 \text{ V}, I_S = 100 \text{ mA}$
Channels (ΔR _{ON})					

Table 3.

PCN 20_0174 data sheet

 V_{DD} = 1.65 V to ±1.95 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 6.									
Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments				
ANALOG SWITCH									
Analog Signal Range			$0VtoV_{\text{DD}}$	v					
On Resistance (R _{ON})	1			Ωtyp	V_{DD} = 1.8 V, V _S = 0 V to V _{DD} , I _S = 100 mA; Error! Reference source not found.19				
	1.6	2.4	2.4	Ωmax					
	2.7	4.2	4.2	Ωmax	$V_{\text{DD}} = 1.65 \text{ V}, \text{ V}_{\text{S}} = 0 \text{ V to } V_{\text{DD}}, \text{ I}_{\text{S}} = 100 \text{ mA}$ Error! Reference source not found.19				
On-Resistance Match Between Channels (ΔR_{ON})	0.1			Ωtyp	V_{DD} = 1.65 V, V_{S} = 0.7 V, I_{S} = 100 mA				

ADG836L Rev. B to PCN 20_0174 Data sheet

ADG836L Rev. B datasheet

 $V_{DD} = 2.7$ V to 3.6 V, GND = 0 V, unless otherwise noted. Temperature range for Y version is -40° C to $+125^{\circ}$ C.

Table 1.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	$V_{DD} = 2.7 V$
On Resistance (R _{on})	0.5			Ωtyp	$V_{DD} = 2.7 \text{ V}, V_{S} = 0 \text{ V} \text{ to } V_{DD}, I_{S} = 10 \text{ mA}$
	0.65	0.75	0.8	Ωmax	See Figure 18
On Resistance Match Between Channels (ΔR _{on})	0.04	0.075	0.08	Ωtyp	$V_{DD} = 2.7 \text{ V}, V_{S} = 0.65 \text{ V}, I_{S} = 10 \text{ mA}$
On Resistance Flatness (R _{FLAT (ON)})	0.1			Ωtyp	$V_{DD} = 2.7 V, V_{S} = 0 V \text{ to } V_{DD}, I_{S} = 10 \text{ mA}$
		0.15	0.16	Ωmax	

PCN 20_0174 data sheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted. Temperature range for the Y version is -40°C to +125°C.

Table 7.					
Parameter	+25°C	–40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	V _{DD} = 2.7 V
On Resistance (R _{ON})	0.5			Ωtyp	V _{DD} = 2.7 V, V _S = 0 V to V _{DD} , I _S = 10 mA See Error! Reference source not found. 18
	0.75	0.85	0.9	Ωmax	
On Resistance Match Between Channels (ΔR _{0N})	0.04	0.075	0.08	Ωtyp	V _{DD} = 2.7 V, V _s = 0.65 V, I _s = 10 mA
On Resistance Flatness ($R_{FLAT (ON)}$)	0.1			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
	0.18	0.18	0.19	Ωmax	

ADG836L Rev. B datasheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. Temperature range for Y version is -40°C to +125°C.

Parameter	+25°C	–40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (R _{on})	0.65			Ωtyp	$V_{DD} = 2.3 V$, $V_{S} = 0 V$ to V_{DD} , $I_{S} = 10 mA$
	0.72	0.8	0.88	Ωmax	See Figure 18
On Resistance Match Between Channels (ΔR _{oN})	0.04			Ωtyp	$V_{DD} = 2.3 \text{ V}, V_{S} = 0.7 \text{ V}, I_{S} = 10 \text{ mA}$
		0.08	0.085	Ωmax	
On Resistance Flatness (R _{FLAT (ON)})	0.16			Ωtyp	$V_{DD} = 2.3 \text{ V}, V_{S} = 0 \text{ V} \text{ to } V_{DD}, I_{S} = 10 \text{ mA}$
		0.23	0.24	Ωmax	

Table 2.

PCN 20_0174 data sheet

 V_{DD} = 2.5 V ± 0.2 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Parameter	+25°C	–40°C to +85°C	–40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance (R_{ON})	0.65			Ω typ	V_{DD} = 2.3 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA See Error! Reference source not found. 18
	0.84	0.92	1.0	Ωmax	
On Resistance Match Between Channels (ΔR_{ON})	0.04			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0.7 V, I _S = 10 mA
	0.1	0.1	0.105	Ωmax	
On Resistance Flatness ($R_{FLAT (ON)}$)	0.16			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
	0.25	0.25	0.26	Ωmax	
		1			

ADG836L Rev. B datasheet

 V_{DD} = 1.65 V ± 1.95 V, GND = 0 V, unless otherwise noted. Temperature range for Y version is -40°C to +125°C.

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Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (R _{ON})	1			Ωtyp	$V_{DD} = 1.8 V$, $V_{s} = 0 V$ to V_{DD} , $I_{s} = 10 mA$
	1.4	2.2	2.2	Ωmax	See Figure 18
	2	4	4	Ωtyp	$V_{DD} = 1.65 \text{ V}, V_{S} = 0 \text{ V to } V_{DD}, I_{S} = 10 \text{ mA}$
On Resistance Match Between Channels (ΔR _{on})	0.1			Ωtyp	$V_{DD} = 1.65 \text{ V}, V_{S} = 0.7 \text{ V}, I_{S} = 10 \text{ mA}$

PCN 20_0174 data sheet

 V_{DD} = 1.65 V to 1.95 V, GND = 0 V, unless otherwise noted. The temperature range for the Y version is -40°C to +125°C.

Table 9.

Parameter	+25°C	–40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	v	
On Resistance (R _{ON})	1			Ω typ	V _{DD} = 1.8 V, V _S = 0 V to V _{DD} , I _S = 10 mA See Error! Reference source not found. 18
	1.6	2.4	2.4	Ωmax	
	2.7	4.2	4.2	Ω typ	V_{DD} = 1.65 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
On Resistance Match Between Channels (ΔR _{ON})	0.1			Ω typ	V_{DD} = 1.65 V, V_S = 0.7 V, I_S = 10 mA

ADG804 Rev. A datasheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted. 1

Table 1.

		–40°C to	–40°C to		
Parameter	+25°C	+85°C	+125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{\text{DD}}$	V	
On Resistance (Ron)	0.5			Ωtyp	$V_{DD} = 2.7 \text{ V}; V_S = 0 \text{ V} \text{ to } V_{DD}, I_S = 10 \text{ mA};$ Figure 18
	0.65	0.75	0.8	Ωmax	
On Resistance Match between	0.04			Ωtyp	$V_{DD} = 2.7 \text{ V}; V_s = 0.65 \text{ V}, I_s = 10 \text{ mA}$
Channels (ΔR _{on})		0.075	0.08	Ωmax	
On Resistance Flatness (R _{FLAT(ON)})	0.1			Ωtyp	$V_{DD} = 2.7 \text{ V}; V_S = 0 \text{ V} \text{ to } V_{DD},$
		0.15	0.16	Ωmax	$I_s = 10 \text{ mA}$

PCN 20_0174 data sheet

 V_{DD} = 2.7 V to 3.6 V, GND = 0 V, unless otherwise noted.¹

Table 10.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance (R _{ON})	0.5			Ωtyp	V _{DD} = 2.7 V, V _S = 0 V to V _{DD} , I _S = 10 mA; Error! Reference source not found.18
	0.75	0.85	0.9	Ωmax	
On Resistance Match between Channels (ΔR_{ON})	0.04			Ωtyp	V_{DD} = 2.7 V, V_{S} = 0.65 V, I_{S} = 10 mA
	0.095	0.095	0.1	Ωmax	
On Resistance Flatness (R _{FLAT (ON)})	0.1			Ωtyp	V_{DD} = 2.7 V, V_S = 0 V to V_{DD} ,
	0.18	0.18	0.19	Ωmax	I _s = 10 mA

ADG804 Rev. A datasheet

 V_{DD} = 2.5 V \pm 0.2 V, GND = 0 V, unless otherwise noted.1

Table 2.

		–40°C to	–40°C to		
Parameter	+25°C	+85°C	+125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (R _{ON})	0.65			Ωtyp	$V_{DD} = 2.3 \text{ V}$; $V_s = 0 \text{ V}$ to V_{DD} , $I_s = 10 \text{ mA}$; Figure 18
	0.77	0.8	0.88	Ωmax	
On Resistance Match between	0.4			Ωtyp	$V_{DD} = 2.3 \text{ V}; V_s = 0.7 \text{ V}; I_s = 10 \text{ mA}$
Channels (AR _{on})		0.08	0.085	Ωmax	
On Resistance Flatness (R _{FLAT(ON)})	0.16			Ωtyp	$V_{DD} = 2.3 \text{ V}$; $V_S = 0 \text{ V}$ to V_{DD} ; $I_S = 10 \text{ mA}$
		0.23	0.24	Ωmax	

PCN 20_0174 data sheet

 V_{DD} = 2.5 V \pm 0.2 V, GND = 0 V, unless otherwise noted.1

Table 11.

Parameter	+25°C	-40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance (R_{ON})	0.65			Ωtyp	V _{DD} = 2.3 V, V _S = 0 V to V _{DD} , I _S = 10 mA; Error! Reference source not found.18
	0.84	0.92	1.0	Ωmax	
On Resistance Match Between Channels (ΔR_{ON})	0.04			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0.7 V, I_{S} = 10 mA
	0.1	0.1	0.105	Ωmax	
On Resistance Flatness ($R_{FLAT (ON)}$)	0.16			Ωtyp	V_{DD} = 2.3 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA
	0.25	0.25	0.26	Ωmax	

ADG804 Rev. A datasheet

 V_{DD} = 1.65 V \pm 1.95 V, GND = 0 V, unless otherwise noted. 1

Table 3.

	-40°C to +85°C -40°C to				
Parameter	+25°C		+125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			0 V to V _{DD}	V	
On Resistance (Ron)	1			Ωtyp	$V_{DD} = 1.8 \text{ V}; V_s = 0 \text{ V} \text{ to } V_{DD}, I_s = 10 \text{ mA}$
	1.4	2.2	2.2	Ωmax	
	2.2	4	4	Ωmax	$V_{DD} = 1.65 \text{ V}, \text{ V}_{\text{S}} = 0 \text{ V} \text{ to } \text{V}_{\text{DD}},$ $I_{\text{S}} = 10 \text{ mA}; \text{ Figure 18}$
On Resistance Match between Channels (ΔR_{ON})	0.1			Ωtyp	$V_{\text{DD}} = 1.65 \text{ V}, V_{\text{S}} = 0.7 \text{ V}, I_{\text{S}} = 10 \text{ mA}$

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 V_{DD} = 1.65 V to 1.95 V, GND = 0 V, unless otherwise noted.1

Table 12.

Parameter	+25°C	–40°C to +85°C	-40°C to +125°C	Unit	Test Conditions/Comments
ANALOG SWITCH					
Analog Signal Range			$0 V to V_{DD}$	v	
On Resistance (R _{ON})	1			Ω typ	V_{DD} = 1.8 V, V_{S} = 0 V to V_{DD} , I_{S} = 10 mA;
	1.6	2.4	2.4	Ωmax	
	2.7	4.2	4.2	Ωmax	$\label{eq:VDD} \begin{split} V_{DD} &= 1.65 \ V, \ V_S = 0 \ V \ to \ V_{DD}, \\ I_S &= 10 \ mA; \ \text{Error! Reference source not} \\ \textbf{found.} 18 \end{split}$
On Resistance Match between Channels (ΔR_{ON})	0.1			Ωtyp	V _{DD} = 1.65 V, V _S = 0.7 V, I _S = 10 mA