PCN 19_0105

MUX08 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 MUX08 8-Channel JFET Analog Multiplexer.

For full product information please refer to the MUX08 Rev. C data sheet.

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

The tables below outline the relevant data sheet specification comparisons from Rev. B to Rev. C. The changed specifications are highlighted in red font.

SPECIFICATION CHANGES FROM Rev. B to Rev. C

Rev. B

ELECTRICAL CHARACTERISTICS at V+ = 15V, V− = −15V and −55° C ≤ T_A ≤ 125° C, unless otherwise noted.

PARAMETER	SYMBOL	CONDITIONS		MUX-08A/ MUX-24A MIN	TYP	MAX	MUX-08B/ MUX-24B MIN	TYP	MAX	UNITS
"ON" Resistance	R_{ON}	$V_S \leq 10V$, $I_S \leq 200\mu A$		—	—	400	—	—	500	Ω
ΔR_{ON} With Applied Voltage	ΔR_{ON}	$-10V \leq V_S \leq 10V$, $I_S = 200\mu A$		—	1.5	—	—	4.5	—	%
R_{ON} Match Between Switches	R_{ON} Match	$V_S = 0V$, $I_S = 200\mu A$		—	10	—	—	15	—	%
Analog Voltage Range	V_A	(Note 6)		+10 −10	+10.4 −15	— —	+10 −10	+10.4 −15	— —	V
Source Current (Switch "OFF")	$I_{S(OFF)}$	$V_S = 10V$, $V_D = -10V$ (Notes 1, 7)		—	—	25	—	—	50	nA
Drain Current (Switch "OFF")	$I_{D(OFF)}$	$V_S = 10V$, $V_D = -10V$ (Notes 1, 7)	MUX-08 MUX-24	— —	— —	100 50	— —	— —	500 500	nA
Leakage Current (Switch "ON")	$I_{D(ON)}$ $+I_{S(ON)}$	$V_D = 10V$ (Notes 1, 7)	MUX-08 MUX-24	— —	— —	100 50	— —	— —	500 500	nA
Digital "1" Input Voltage	V_{INH}	(Note 6)		2	—	—	2	—	—	V
Digital "0" Input Voltage	V_{INL}	(Note 6)		—	—	0.7	—	—	0.7	V
Digital Input Current	I_{IN}	$V_{IN} = 0.4V$ to 15V		—	—	20	—	—	20	μA
Digital "0" Enable Current	$I_{INL(EN)}$	$V_{EN} = 0.4V$		—	—	20	—	—	20	μA
Positive Supply Current	I+	All Digital Inputs Logic "0" or "1"		—	—	15	—	—	15	mA
Negative Supply Current	I−	All Digital Inputs Logic "0" or "1"		—	—	5	—	—	5	mA

Rev. C

ELECTRICAL CHARACTERISTICS at V+ = 15V, V− = −15V and −55° C ≤ T_A ≤ 125° C, unless otherwise noted.

PARAMETER	SYMBOL	CONDITIONS		MUX-08A/ MUX-24A MIN	TYP	MAX	MUX-08B/ MUX-24B MIN	TYP	MAX	UNITS
"ON" Resistance	R_{ON}	$V_S \leq 10V$, $I_S \leq 200\mu A$		—	—	425	—	—	500	Ω
ΔR_{ON} With Applied Voltage	ΔR_{ON}	$-10V \leq V_S \leq 10V$, $I_S = 200\mu A$		—	1.5	—	—	4.5	—	%
R_{ON} Match Between Switches	R_{ON} Match	$V_S = 0V$, $I_S = 200\mu A$		—	10	—	—	15	—	%
Analog Voltage Range	V_A	(Note 6)		+10 −10	+10.4 −15	— —	+10 −10	+10.4 −15	— —	V
Source Current (Switch "OFF")	$I_{S(OFF)}$	$V_S = 10V$, $V_D = -10V$ (Notes 1, 7)		—	—	25	—	—	50	nA
Drain Current (Switch "OFF")	$I_{D(OFF)}$	$V_S = 10V$, $V_D = -10V$ (Notes 1, 7)	MUX-08 MUX-24	— —	— —	100 50	— —	— —	500 500	nA
Leakage Current (Switch "ON")	$I_{D(ON)}$ $+I_{S(ON)}$	$V_D = 10V$ (Notes 1, 7)	MUX-08 MUX-24	— —	— —	100 50	— —	— —	500 500	nA
Digital "1" Input Voltage	V_{INH}	(Note 6)		2	—	—	2	—	—	V
Digital "0" Input Voltage	V_{INL}	(Note 6)		—	—	0.7	—	—	0.7	V
Digital Input Current	I_{IN}	$V_{IN} = 0.4V$ to 15V		—	—	20	—	—	20	μA
Digital "0" Enable Current	$I_{INL(EN)}$	$V_{EN} = 0.4V$		—	—	20	—	—	20	μA
Positive Supply Current	I+	All Digital Inputs Logic "0" or "1"		—	—	15	—	—	15	mA
Negative Supply Current	I−	All Digital Inputs Logic "0" or "1"		—	—	5	—	—	5	mA