Analog Switches Product Information (Cont'd)

Drivers and Gates (Cont'd)

Basic Part No. (Notes 1 & 2)	Switch Type	$r_{DS(on)}$ Max. (Ω) (Note 3)	Analog Voltage Range (p-p V) (Note 3)	Switching Time (μs) t_{ON}	Switching Time (μs) t_{OFF}	Logic Input for ON Switch	Logic Levels (V) V_{INL}	Logic Levels (V) V_{INH}	Opt. Sup. Voltage (V) (+) Sup. V_1	Opt. Sup. Voltage (V) (−) Sup. V_2	Opt. Sup. Voltage (V) Logic Sup. V_l	Comments
Eight Channel MUX + Enable (Cont'd)												
***DG508A**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	
***DG528**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	With Input Latches
SI3705	PMOS	150-400	10	1.5	(Note 8)	(Note 7)	0.6	3.5	5	-20	—	See DG501/No Pullup Resistors
Sixteen Channel MUX + Enable												
DG506	CMOS	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	Break-Before-Make
***DG506A**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	
Four Channel Differential MUX												
DG509	CMOS	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	Break-Before-Make
***DG509A**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	
***DG529**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	With Input Latches
Eight Channel Differential MUX + Enable												
DG507	CMOS	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	Break-Before-Make
***DG507A**	CMOS Plus-40	400	30	1.0	(Note 8)	(Note 7)	0.8	2.4	15	-15	—	
Four Channel SPDT D/A Converter Summing Node Switches												
DG515	NMOS	See Comments	—	0.120	0.170	(Note 5)	0.5	7.5	8.0	0	—	$R_1 = 6.25\Omega$, $R_2 = 12.5\Omega$, $R_3 = 25\Omega$, $R_4 = 50\Omega$
Ten Channel SPDT D/A Converter Summing Node Switches												
DG516	NMOS	See Comments	—	0.120	0.170	(Note 5)	0.5	7.5	8.0	0	—	$R_1 = 100\Omega$, $R_2 = 200\Omega$, $R_3 = 400\Omega$, $R_4 = 800\Omega$, $R_5 = 1600\Omega$, $R_{6-10} = 3200\Omega$

Multiple FET Switches

Siliconix P-Channel MOSFET & DMOS Switches are available for such applications as sequential switching (commutation), signal processing, modulation, and A-to-D conversion. The MOSFET is normally OFF. These devices are also available with Siliconix drivers in a single package.

Basic Part Number (Note 2)	Circuit Function: SOURCES	Circuit Function: DRAINS	Circuit Function: GATES	Switch Type	Pull Up On Gate	r_{DS} Max. (V) @ V_S = +10V	r_{DS} Max. (V) @ V_S = −10V	BV_{DSS}	$I_{S(off)}$ (nA)	$V_{GS(th)}$ Min.	$V_{GS(th)}$ Max.	C_{gs} Typ. (pF)	C_{ds} Typ. (pF)	C_{sb} Typ. (pF)
G115	6	1	6	SP6T	Yes	100	450	-30	0.5	-1.5	-4.0	0.9	0.4	2
G118	6	1	8	SP6T	No	100	450	-30	0.5	-1.5	-4.0	0.9	0.4	2
G119	6	2	3	DP3T	Yes	100	450	-30	0.5	-1.5	-4.0	1.8	0.4	2
G122	4	2	2	DPDT	Yes	100	450	-30	0.5	-1.5	-4.0	1.8	0.4	2
G123	4	2	4	2 × SPDT	Yes	100	450	-30	0.5	-1.5	-4.0	1.8	0.4	2
***SD5000**	4	4	4	4 × SPST	No	50		20	10.0	0.1	2.0	3.5	0.5	4
***SD5001**	4	4	4	4 × SPST	No	50		10	10.0	0.1	2.0	3.5	0.5	4
***SD5002**	4	4	4	4 × SPST	No	50		15	10.0	0.1	2.0	3.5	0.5	4
***SD5200**	4	4	4	4 × SPST	No	80		30	1000	0.5	2.0	3.5	0.5	4

*Devices recommended for new designs are indicated in **bold face** type.