

Analog Switches

General Purpose Analog Switches

Harris offers two general-purpose switch lines, each with various switch configurations. The first consists of bipolar drivers controlling an associated set of field-effect switching transistors in a multi-chip structure that provides a wide choice of parameters at low cost. The second is a monolithic CMOS

structure capable of improved performance and greater reliability. All have break-before-make switch action. All switches are available in commercial and military temperature ranges. Package options include Plastic S.O.I.O. (not all options are available for all devices types).

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Switch Family †	Special Features	Switch Type	R _{DS(ON)} Ω Max	Switches Parameters			
				I _{D(OFF)} nA Max	t _{ON} ns Max	t _{OFF} ns Max	Analog Voltage Range (V _{Supply} = ±15V)
Multichip							
DG123-125	Inverting/non-inverting logic Inputs	PMOS	600	4	300	1000	-
DG126-145	Dual Channel/Single Channel	N-JFET	10	10	1000	2500	-
			15	10	1000	2500	-
			30	1	600	1600	-
			50	1	600	1600	-
			80	1	600	1600	-
DG180-191	Mature, industry-standard switch, JAN38510 Approved	N-JFET	10	10	300	250	-7.5 to +15
			30	1	150	130	-7.5 to +15
			75	1	250	130	-10 to +15
Monolithic							
DG200/201	Industry-standard low cost	CMOS	70/80	2.0	1000	500	-15 to +15
DG201A DG202	Inverting Non-Inverting	CMOS	175	1.0	600	450	-15 to +15
		CMOS	175	1.0	600	450	-15 to +15
DG211 DG212	Inverting Non-Inverting	CMOS	175	5.0	1000	500	-15 to +15
DG300A-303A	TTL compatible, low power	CMOS	50	1.0	300	250	-15 to +15
DG308A DG309	Normally-Closed Normally-Open	CMOS	100	1	200	150	-15 to +15
		CMOS	100	1	200	150	-15 to +15
IH5040-47 IH5052-53	Low quiescent current Low R _{DS(ON)}	CMOS	75	1.0	1000	500	-10 to +10
			75	1.0	500	250	-11 to +11
IH5140-45	High speed, low power, low leakage	CMOS	50	0.5	175	125*	-11 to +11
					200	125	
IH5148-51	Low R _{DS(ON)} , high speed, low power	CMOS	25	1.0	250	200	-14 to +14
					350	250	
					500	250	

*Switching times are for the IH5140 and IH5145 † Switch configurations included in this section.