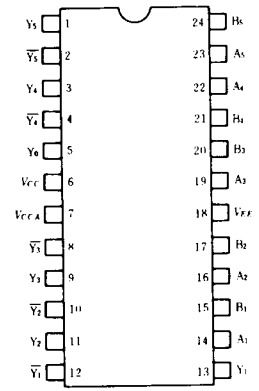
Quintuple Exclusive-OR/NOR Gates

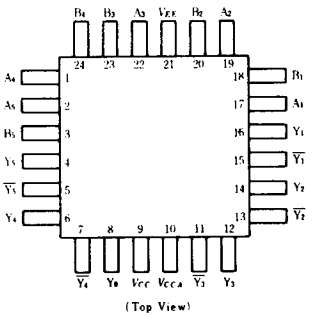
■ PIN ARRANGEMENT

● HD100107



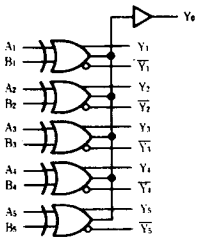
(Top View)

● HD100107F



(Top View)

■ LOGIC DIAGRAM



■ DC CHARACTERISTICS (V_{EE} = −4.2 to −4.8V, V_{CC} = V_{CCA} = GND, Ta = 0 to +85℃)

Item	Symbol	Test Condition		min	typ	max	Unit
Supply Current	I_{EE}	All input open		46	66	96	mA
Input Current	I_{IH}	V_{IN} = $V_{IH\ max}$	B_1, B_2, B_3, B_4, B_5	—	—	250	μA
			A_1, A_2, A_3, A_4, A_5	—	—	350	μA

Note) As for other itema, refer to the "Common DC Characteristics".

■ AC CHARACTERISTICS (V_{EE} = −2.2 to −2.8V, V_{CC} = V_{CCA} = 2.0V)

● HD100107

Item	Symbol	Test Condition		0℃		25℃			85℃		UnIt
				min	max	min	typ	max	min	max	
Propagation Delay Time	t_{PLH} t_{PHL}	See test circuit and waveform	B_n input→Y_n, $\overline{Y_n}$	0.55	1.70	0.55	1.10	1.70	0.55	1.70	ns
			A_n input→Y_n, $\overline{Y_n}$	0.55	1.60	0.55	0.90	1.60	0.55	1.60	
			Data→Y_0	1.00	2.65	1.10	1.85	2.65	1.10	2.65	
Transition Time	t_{TLH} t_{THL}			0.40	1.20	0.40	0.70	1.20	0.40	1.20	ns

● HD100107F

Item	Symbol	Test Condition		0℃		25℃			85℃		Unit
				min	max	min	typ	max	min	max	
Propagation Delay Time	t_{PLH} t_{PHL}	See test circuit and waveform	B_n input→Y_n, $\overline{Y_n}$	0.55	1.55	0.55	1.10	1.55	0.55	1.65	ns
			A_n input→Y_n, $\overline{Y_n}$	0.55	1.20	0.55	0.90	1.20	0.55	1.30	
			Data→Y_0	1.05	2.55	1.15	1.85	2.55	1.15	2.55	
Transition Time	t_{TLH} t_{THL}			0.45	1.20	0.45	0.70	1.20	0.45	1.20	ns

Notes) The circuits in a test socket or mounted on a printed circuit board and transverse air flow greater than 2.5m/s (500 linear fpm) is maintained.