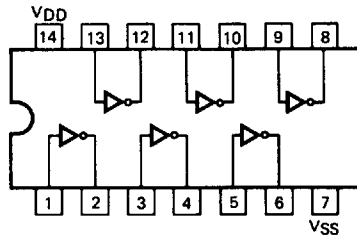


GD4069UB

HEX INVERTER

DESCRIPTION — The 4069UB is a general purpose Hex Inverter which has standard GS input and output characteristics. A single-stage design has been used since the output impedance of a single-input gate is not pattern sensitive. The 4069UB is a Direct Replacement for the 74C04/54C04.

LOGIC AND CONNECTION DIAGRAM
DIP (TOP VIEW)



NOTE:
The SO Package has the same pinouts (Connection Diagram) as the Dual In-line Package.

DC CHARACTERISTICS: V_{DD} as shown, $V_{SS} = 0$ V (See Note 1)

SYMBOL	PARAMETER		LIMITS									UNITS	TEMP	TEST CONDITIONS
			V _{DD} = 5 V			V _{DD} = 10 V			V _{DD} = 15 V					
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX			
I _{DD}	Quiescent Power	XC			1			2			4	μA	MIN, 25°C	All inputs at 0 V or V _{DD}
					7.5			15			30		MAX	
	Supply Current	XM			0.25			0.5			1	μA	MIN, 25°C	
					7.5			15			30		MAX	

AC CHARACTERISTICS AND SET-UP REQUIREMENTS: V_{DD} as shown, $V_{SS} = 0$ V, $T_A = 25^\circ\text{C}$ (See Note 2)

SYMBOL	PARAMETER	LIMITS									UNITS	TEST CONDITIONS
		V _{DD} = 5 V			V _{DD} = 10 V			V _{DD} = 15 V				
		MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX		
t _{PLH}	Propagation Delay		32	64		16	32		13	26	ns	C _L = 50 pF, R _L = 200 kΩ
t _{PHL}			32	64		16	32		13	26		
t _{TLH}	Output Transition Time		45	135		23	70		18	45	ns	Input Transition Times < 20 ns
t _{THL}			45	135		23	70		18	45		

NOTES:

1. Additional DC Characteristics are listed in this section under 4000B Series CMOS Family Characteristics.
2. Propagation Delays and Output Transition Times are graphically described in this section under 4000B Series CMOS Family Characteristics.

TYPICAL ELECTRICAL CHARACTERISTICS

