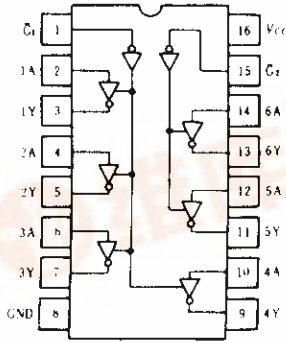


# HD74L9368A

Hex Bus Drivers (inverted data outputs with three-state outputs)

## PIN ARRANGEMENT



(Top View)

## ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Ratings	Unit
Supply voltage	$V_{CC}$	7.0	V
Input voltage	$V_{IS}$	7.0	V
Output voltage (off-state)	$V_{IOFF}$	5.5	V
Operating temperature range	$T_{op}$	-20 ~ +75	°C
Storage temperature range	$T_{stg}$	-65 ~ +150	°C

## FUNCTION TABLE

$\bar{C}$	A	Y
H	X	Z
L	L	H
L	H	L

Note) H: high level, L: low level,  
X: irrelevant  
Z: off (high-impedance) state  
of a 3-state output

## RECOMMENDED OPERATING CONDITIONS

Item	Symbol	min	typ	max	Unit
Output current	$I_{OH}$	—	—	-2.6	mA
Output current	$I_{OL}$	—	—	24	mA

# HD74LS368A

## ■ ELECTRICAL CHARACTERISTICS ( $T_a = -20 \sim +75^\circ\text{C}$ )

Item	Symbol	Test Conditions	min	typ*	max	Unit	
Input voltage	$V_{IH}$		2.0	—	—	V	
	$V_{IL}$		—	—	0.8		
Output voltage	$V_{OH}$	$V_{CC} = 4.75\text{V}, V_{IH} = 2\text{V}, V_{IL} = 0.8\text{V}, I_{OH} = -2.6\text{mA}$	2.4	—	—	V	
	$V_{OL}$	$V_{CC} = 4.75\text{V}, V_{IH} = 2\text{V}, V_{IL} = 0.8\text{V}$	$I_{OL} = 12\text{mA}$	—	—		0.4
$I_{OL} = 24\text{mA}$			—	—	0.5		
Output current	$I_{OZ}$	$V_{CC} = 5.25\text{V}, V_{IH} = 2\text{V}, V_{IL} = 0.8\text{V}$	$V_O = 2.4\text{V}$	—	—	20	$\mu\text{A}$
			$V_O = 0.4\text{V}$	—	—	-20	
Input current	A inputs	$I_{IH}$	$V_{CC} = 5.25\text{V}, V_I = 2.7\text{V}$	—	—	20	$\mu\text{A}$
		$I_{IL}$	$V_{CC} = 5.25\text{V}, V_I = 0.5\text{V}, \bar{G}$ input at 2V	—	—	-20	$\mu\text{A}$
	$V_{CC} = 5.25\text{V}, V_I = 0.4\text{V}, \bar{G}$ inputs at 0.4V		—	—	-0.4	mA	
	$\bar{G}$ inputs	$V_{CC} = 5.25\text{V}, V_I = 0.4\text{V}$	—	—	-0.4		
		$I_i$	$V_{CC} = 5.25\text{V}, V_I = 7\text{V}$	—	—	0.1	mA
Short-circuit output current	$I_{OS}$	$V_{CC} = 5.25\text{V}$	-40	—	-225	mA	
Supply current **	$I_{CC}$	$V_{CC} = 5.25\text{V}$	—	12	21	mA	
Input clamp voltage	$V_{IK}$	$V_{CC} = 5.25\text{V}, I_{IN} = -18\text{mA}$	—	—	-1.5	V	

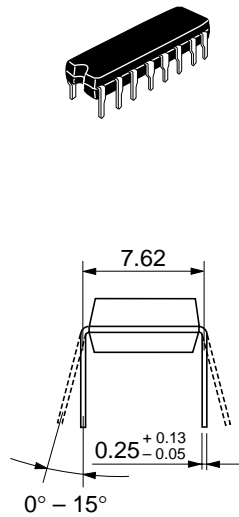
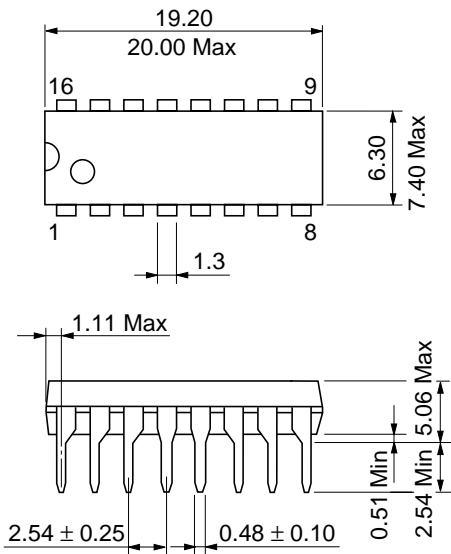
\*  $V_{CC} = 5\text{V}, T_a = 25^\circ\text{C}$

\*\* With all outputs open,  $I_{CC}$  is measured with all inputs grounded and all  $\bar{G}$  inputs at 4.5V.

## ■ SWITCHING CHARACTERISTICS ( $V_{CC} = 5\text{V}, T_a = 25^\circ\text{C}$ )

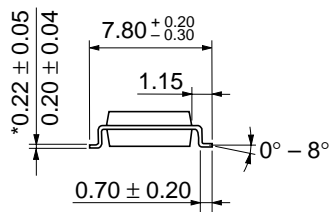
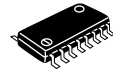
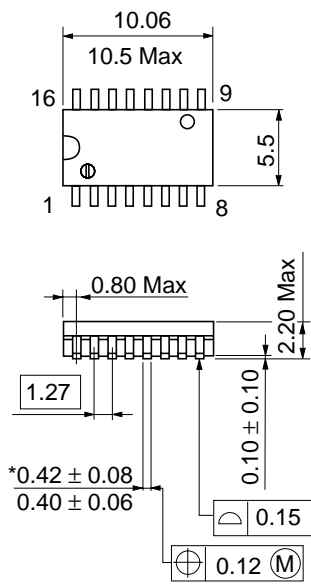
Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	$t_{PLH}$	$C_L = 45\text{pF}, R_L = 667\Omega$	—	7	15	ns
	$t_{PHL}$		—	12	18	
Output enable time	$t_{ZH}$		—	18	35	
	$t_{ZL}$		—	28	45	
Output disable time	$t_{HZ}$	$C_L = 5\text{pF}, R_L = 667\Omega$	—	—	32	
	$t_{LZ}$		—	—	35	

Note) Refer to Test Circuit and Waveform of the Common Item

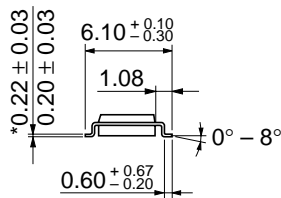
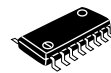
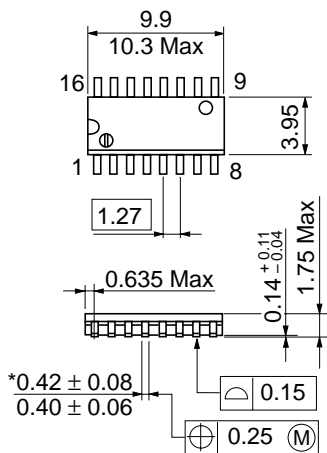


Unit: mm

Unit: mm



Unit: mm



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