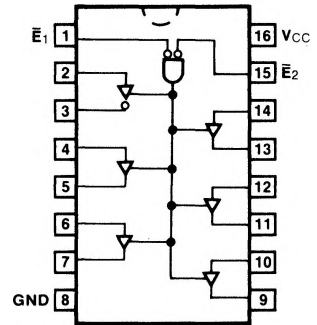


# 54LS/74LS365A

## HEX 3-STATE BUFFER

(With Common 2-Input NOR Enable)

### CONNECTION DIAGRAM PINOUT A



**ORDERING CODE:** See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		$V_{CC} = +5.0\text{ V} \pm 5\%$ , $T_A = 0^\circ\text{ C to } +70^\circ\text{ C}$	$V_{CC} = +5.0\text{ V} \pm 10\%$ , $T_A = -55^\circ\text{ C to } +125^\circ\text{ C}$	
Plastic DIP (P)	A	74LS365APC		9B
Ceramic DIP (D)	A	74LS365ADC	54LS365ADM	6B
Flatpak (F)	A	74LS365AFC	54LS365AFM	4L

### TRUTH TABLE

INPUTS			OUTPUTS
$\bar{E}_1$	$\bar{E}_2$	D	
L	L	L	L
L	L	H	H
H	X	X	Z
X	H	X	Z

H = HIGH Voltage Level  
L = LOW Voltage Level  
X = Immaterial  
Z = High Impedance

**INPUT LOADING/FAN-OUT:** See Section 3 for U.L. definitions

PINS	54/74LS (U.L.) HIGH/LOW
Inputs	0.5/0.25
Outputs	25/15 (7.5)

**DC AND AC CHARACTERISTICS:** See Section 3\*

SYMBOL	PARAMETER	54/74LS		UNITS	CONDITIONS
		Min	Max		
$I_{CC}$	Power Supply Current		24	mA	$V_{CC} = \text{Max}$ , $V_{IN} = 0\text{ V}$ , $V_E = 4.5\text{ V}$
$t_{PLH}$ $t_{PHL}$	Propagation Delay Data to Output		16 22	ns	Figs. 3-1, 3-4 $C_L = 50\text{ pF}$
$t_{PZH}$ $t_{PZL}$	Output Enable Time		24 30	ns	Figs. 3-3, 3-11, 3-12 $R_L = 667\ \Omega$ , $C_L = 50\text{ pF}$
$t_{PLZ}$ $t_{PHZ}$	Output Disable Time		20 25	ns	Figs. 3-3, 3-11, 3-12 $R_L = 667\ \Omega$ , $C_L = 5\text{ pF}$

\*DC limits apply over operating temperature range; AC limits apply at  $T_A = +25^\circ\text{ C}$  and  $V_{CC} = +5.0\text{ V}$ .