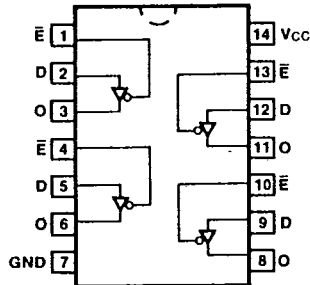


54/74125 54LS/74LS125A

QUAD BUS BUFFER GATE

(With 3-State Outputs)

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	74125PC, 74LS125APC		9A
Ceramic DIP (D)	A	74125DC, 74LS125ADC	54125DM, 54LS125ADM	6A
Flatpak (F)	A	74125FC, 74LS125AFC	54125FM, 54LS125AFM	3I

TRUTH TABLE

INPUTS		OUTPUT
\bar{E}	D	
L	L	L
L	H	H
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	54/74 (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs	1.0/1.0	0.5/0.25
Outputs	130/10 (50)	65/15 (25)/(7.5)

DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	54/74		54/74LS		UNITS	CONDITIONS
		Min	Max	Min	Max		
V _{OH}	Output HIGH Voltage	XM	2.4			V	$I_{OH} = -2.0\text{ mA}$
			2.4				$I_{OH} = -5.2\text{ mA}$
				2.4			$I_{OH} = -1.0\text{ mA}$
				2.4			$I_{OH} = -2.6\text{ mA}$
I _{OS}	Output Short Circuit Current	XM	-30	-70	-30	mA	V _{CC} = Max
			-28	-70	-30		
I _{CC}	Power Supply Current		54		20	mA	Outputs OFF, V _{IN} = Gnd V _E = 4.5 V, V _{CC} = Max
t _{PLH}	Propagation Delay		13		15	ns	Figs. 3-3, 3-5
t _{PHL}	Data to Output		18		18		
t _{PZH}	Output Enable Time		17		16	ns	Figs. 3-3, 3-11, 3-12
t _{PZL}			25		25		
t _{PLZ}	Output Disable Time		8.0		25	ns	Figs. 3-3, 3-11, 3-12
t _{PHZ}			12		25		

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