

**54/74126**  
**54LS/74LS126**  
**QUAD BUS BUFFER GATE**  
 (With 3-State Outputs)

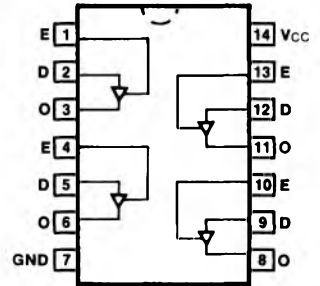
**ORDERING CODE:** See Section 9

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	74126PC, 74LS126PC		9A
Ceramic DIP (D)	A	74126DC, 74LS126DC	54126DM, 54LS126DM	6A
Flatpak (F)	A	74126FC, 74LS126FC	54126FM, 54LS126FM	3I

**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)

**CONNECTION DIAGRAM**  
PINOUT A



**TRUTH TABLE**

INPUTS		OUTPUT
E	D	
H	L	L
H	H	H
L	X	Z

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

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

SYMBOL	PARAMETER	54/74		54/74LS		UNITS	CONDITIONS	
		Min	Max	Min	Max			
V <sub>OH</sub>	Output HIGH Voltage	XM	2.4	2.4	2.4	V	$I_{OH} = -2.0\text{ mA}$	$V_{CC} = \text{Min,}$ $V_{IN} = V_{IH} \text{ or } V_{IL}$
			XC				2.4	
		XM					$I_{OH} = -1.0\text{ mA}$	
			XC				$I_{OH} = -2.6\text{ mA}$	
I <sub>OS</sub>	Output Short Circuit Current	XM		-30 -70	-30 -130	mA	V <sub>CC</sub> = Max	
		XC	-28 -70	-30 -130				
I <sub>CC</sub>	Power Supply Current		62	24	mA	V <sub>CC</sub> = Max V <sub>IN</sub> = Gnd	Outputs LOW, V <sub>E</sub> = 4.5 V	
				20			Outputs OFF, V <sub>E</sub> = 0 V	
t <sub>PLH</sub>	Propagation Delay		13	15	ns	Figs. 3-3, 3-5		
t <sub>PHL</sub>	Data to Output		18	18				
t <sub>PZH</sub>	Output Enable Time		18	20	ns	Figs. 3-3, 3-11, 3-12		
t <sub>PZL</sub>			25	30				
t <sub>PLZ</sub>	Output Disable Time		16	30	ns	Figs. 3-3, 3-11, 3-12		
t <sub>PHZ</sub>			18	30				

\*DC limits apply over operating temperature range; AC limits apply at T<sub>A</sub> = +25°C and V<sub>CC</sub> = +5.0 V.