

✓ 54H/74H62 011187

3-2-2-3-INPUT AND-OR EXPANDER

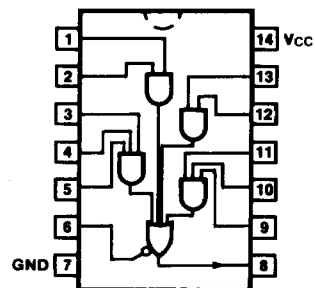
ORDERING CODE: See Section 9

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	74H62PC		9A
Ceramic DIP (D)	A	74H62DC	54H62DM	6A
Flatpak (F)	B	74H62FC	54H62FM	3I

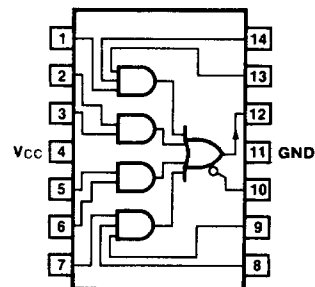
INPUT LOADING/FAN-OUT: See Section 3 for U.L. definitions

PINS	54/74H (U.L.) HIGH/LOW
Inputs	1.25/1.25
Outputs ¹	Note 2

CONNECTION DIAGRAMS PINOUT A



PINOUT B



DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

SYMBOL	PARAMETER	54/74H		UNITS	CONDITIONS ³	
		Min	Max			
V _{ON}	Output ON Voltage		0.4	V	T = -55°C I _{ON} = 5.85 mA T _A = 0°C I _{ON} = 6.3 mA	V _{CC} = Min, V _{IN} = 2.0 V, V _I = 1.0 V
			0.4			
V _{ON}	Output ON Voltage		0.4	V	T _A = +125°C I _{ON} = 7.85 mA T _A = +70°C I _{ON} = 7.4 mA	V _{CC} = Max, V _{IN} = 2.0 V, V _I = 0.6 V
			0.4			
I _{OFF}	Output OFF Current		320	μA	T _A = -55°C T _A = 0°C	V _{CC} = Min, V _{IN} = 0.8 V, V _I = 4.5 V, R = 575 Ω
			570			
I _{ON}	Output ON Current	-470		μA	T _A = -55°C T _A = 0°C	V _{CC} = Min, V _{IN} = 2.0 V, V _I = 1.0 V
		-600				
I _{CC(ON)} I _{CC(OFF)}	Power Supply Current		7.0	mA	V _{IN} = Open V _{IN} = Gnd	V _{CC} = Max, V _I = 0.85 V
			9.0			

1. A maximum of one expander may be connected to one expandable AND-OR-invert gate
2. Expander Outputs
3. V_I is applied to x output terminal during test

OUTPUT CAPACITANCE: V_{CC} and Ground Terminals Open

SYMBOL	PARAMETER	54/74H		UNITS	CONDITIONS
		Min	Max		
C _x	Effective Capacitance of Output Transistor Q ₁		1.3*	pF	f = 1.0 MHz, T _A = +25°C

*Typical Value