54H/74H62

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

ORDERING CODE: See Section 9

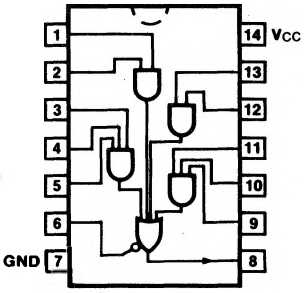
PKGS	PIN OUT	COMMERCIAL GRADE V_{CC} = +5.0 V ±5%, T_A = 0°C to +70°C	MILITARY GRADE V_{CC} = +5.0 V ±10%, T_A = -55°C to +125°C	PKG TYPE
Plastic DIP (P)	A	74H62PC		9A
Ceramic DIP (D)	A	74H62DC	54H62DM	6A
Flatpak (F)	B	74H62FC	54H62FM	3I

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

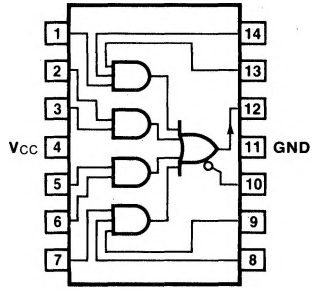
PINS	54/74H (U.L.) HIGH/LOW
Inputs	1.25/1.25
Outputs[1]	Note 2

CONNECTION DIAGRAMS

PINOUT A



PINOUT B



DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

SYMBOL	PARAMETER	54/74H Min	54/74H Max	UNITS	CONDITIONS[3]	
V_{ON}	Output ON Voltage		0.4 0.4	V	T_A = -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
V_{ON}	Output ON Voltage		0.4 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
I_{OFF}	Output OFF Current		320 570	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
I_{ON}	Output ON Current	-470 -600		µA	T_A = -55°C T_A = 0°C	V_{CC} = Min, V_{IN} = 2.0 V, V_I = 1.0 V
$I_{CC(ON)}$ $I_{CC(OFF)}$	Power Supply Current		7.0 9.0	mA	V_{IN} = Open V_{IN} = Gnd	V_{CC} = Max, V_I = 0.85 V

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		
$C_{\overline{X}}$	Effective Capacitance of Output Transistor Q_1		1.3*	pF	f = 1.0 MHz, T_A = +25°C

*Typical Value