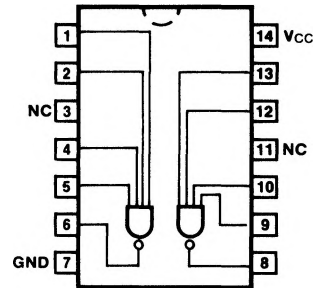


54/7420
54H/74H20
54S/74S20
54LS/74LS20
 DUAL 4-INPUT NAND GATE

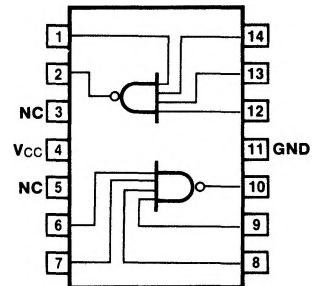
CONNECTION DIAGRAMS
PINOUT A



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	7420PC, 74H20PC 74S20PC, 74LS20PC		9A
Ceramic DIP (D)	A	7420DC, 74H20DC 74S20DC, 74LS20DC	5420DM, 54H20DM 54S20DM, 54LS20DM	6A
Flatpak (F)	A	74S20FC, 74LS20FC	54S20FM, 54LS20FM	3I
	B	7420FC, 74H20FC	5420FM, 54H20FM	

PINOUT B



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

PINS	54/74 (U.L.) HIGH/LOW	54/74H (U.L.) HIGH/LOW	54/74S (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs	1.0/1.0	1.25/1.25	1.25/1.25	0.5/0.25
Outputs	20/10	12.5/12.5	25/12.5	10/5.0 (2.5)

DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	54/74	54/74H	54/74S	54/74LS	UNITS	CONDITIONS	
		Min Max	Min Max	Min Max	Min Max			
I_{CCH}	Power Supply	4.0	8.4	8.0	0.8	mA	$V_{IN} = \text{Gnd}$	$V_{CC} = \text{Max}$
I_{CCL}	Current	11	20	18	2.2		$V_{IN} = \text{Open}$	
t_{PLH} t_{PHL}	Propagation Delay	22 15	10 10	2.0 2.0	4.5 5.0	ns	Figs. 3-1, 3-4	

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