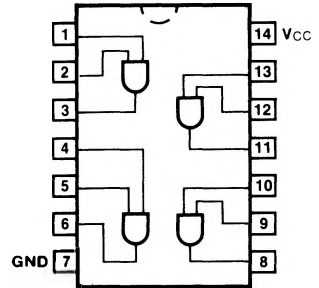


**54/7408**  
**54H/74H08**  
**54S/74S08**  
**54LS/74LS08**  
 QUAD 2-INPUT AND GATE

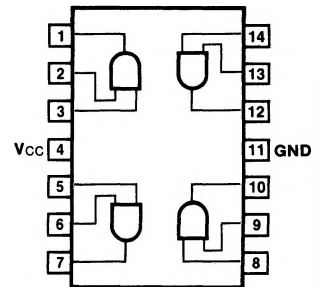
**CONNECTION DIAGRAMS**  
**PINOUT A**



**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	7408PC, 74H08PC 74S08PC, 74LS08PC		9A
Ceramic DIP (D)	A	7408DC, 74H08DC 74S08DC, 74LS08DC	5408DM, 54H08DM 54S08DM, 54LS08DM	6A
Flatpak (F)	A	7408FC, 74S08FC 74LS08FC	5408FM, 54S08FM 54LS08FM	3I
	B	74H08FC	54H08FM	

**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	21	40	32	4.8	mA	$V_{IN} = \text{Open}$ $V_{CC} = \text{Max}$
$I_{CCL}$	Current	33	64	57	8.8		
$t_{PLH}$ $t_{PHL}$	Propagation Delay	27 19	12 12	2.5 7.0 2.5 7.5	13 11	ns	Fig. 3-1, 3-5

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