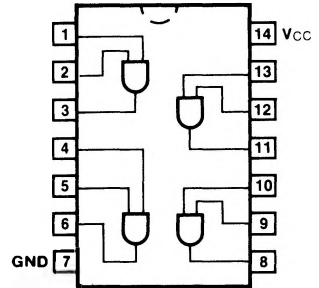


**54/7408**  
**54H/74H08**  
**54S/74S08**  
**54LS/74LS08**  
 QUAD 2-INPUT AND GATE

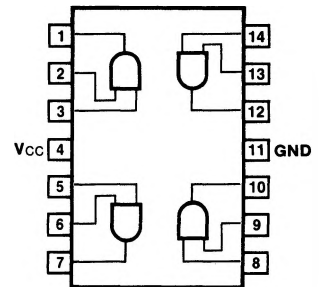
**CONNECTION DIAGRAMS**  
**PINOUT A**



**ORDERING CODE:** See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		V <sub>CC</sub> = +5.0 V ±5%, T <sub>A</sub> = 0°C to +70°C	V <sub>CC</sub> = +5.0 V ±10%, T <sub>A</sub> = -55°C to +125°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 <sub>CCH</sub>	Power Supply	21	40	32	4.8	mA	V <sub>IN</sub> = Open V <sub>CC</sub> = Max
I <sub>CCL</sub>	Current	33	64	57	8.8		
t <sub>PLH</sub> t <sub>PHL</sub>	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<sub>A</sub> = +25°C and V<sub>CC</sub> = +5.0 V.