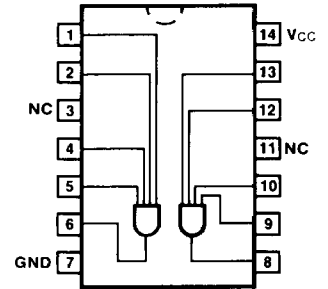


✓ 54/7421 011023  
 ✓ 54H/74H21 011026  
 ✓ 54LS/74LS21 011025  
**DUAL 4-INPUT POSITIVE AND GATE**

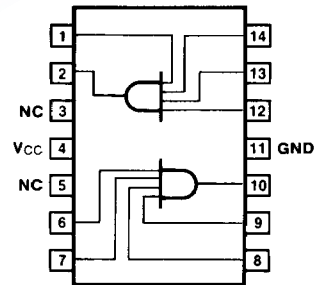
**CONNECTION DIAGRAMS  
PINOUT A**



**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	7421PC, 74H21PC 74LS21PC		9A
Ceramic DIP (D)	A	7421DC, 74H21DC 74LS21DC	5421DM, 54H21DM 54LS21DM	6A
Flatpak (F)	A	7421FC, 74LS21FC	5421FM, 54LS21FM	3I
	B	74H21FC	54H21FM	

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

**DC AND AC CHARACTERISTICS:** See Section 3\*

SYMBOL	PARAMETER	54/74	54/74H	54/74LS	UNITS	CONDITIONS	
		Min Max	Min Max	Min Max			
I <sub>CCH</sub>	Power Supply Current	10	20	2.4	mA	V <sub>IN</sub> = Open	V <sub>CC</sub> = Max
I <sub>CCL</sub>		16	32	4.4		V <sub>IN</sub> = Gnd	
t <sub>PLH</sub> t <sub>PHL</sub>	Propagation Delay	27 19	12 12	15 15	ns	Figs. 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.