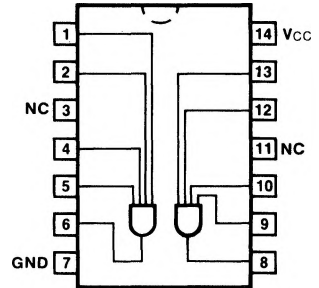


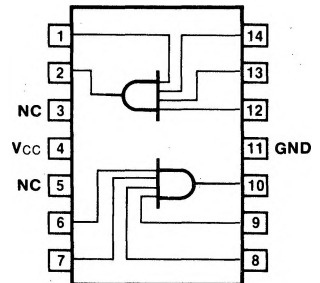
54/7421
54H/74H21
54LS/74LS21

DUAL 4-INPUT POSITIVE AND GATE

CONNECTION DIAGRAMS
PINOUT A



PINOUT B



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	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	

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		$V_{IN} = \text{Open}$	$V_{CC} = \text{Max}$
I_{CCH}	Power Supply Current	10	20	20	32	2.4	4.4	mA		
I_{CCL}		16	32	32	48	4.4	8.8		$V_{IN} = \text{Gnd}$	
t_{PLH} t_{PHL}	Propagation Delay	27	12	12	15	15	15	ns	Figs. 3-1, 3-5	

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