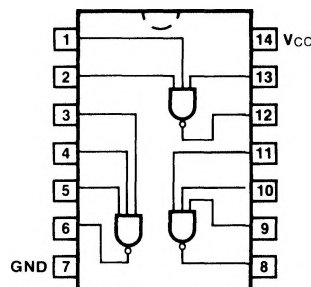


**54/7410**  
**54H/74H10**  
**54S/74S10**  
**54LS/74LS10**  
 TRIPLE 3-INPUT NAND GATE

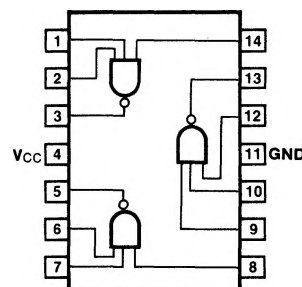
**CONNECTION DIAGRAMS**  
**PINOUT A**



**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	7410PC, 74H10PC 74S10PC, 74LS10PC		9A
Ceramic DIP (D)	A	7410DC, 74H10DC 74S10DC, 74LS10DC	5410DM, 54H10DM 54S10DM, 54LS10DM	6A
Flatpak (F)	A	74S10FC, 74LS10FC	54S10FM, 54LS10FM	3I
	B	7410FC, 74H10FC	5410FM, 54H10FM	

**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		$V_{IN} = \text{Gnd}$ $V_{CC} = \text{Max}$	Fig. 3-1, 3-4
$I_{CCH}$	Power Supply	6.0		12.6		12		1.2		mA		
$I_{CCL}$	Current		16.5		30		27		3.3		$V_{IN} = \text{Open}$	
$t_{PLH}$	Propagation Delay		22		10	2.0	4.5		15	ns	Fig. 3-1, 3-4	
$t_{PHL}$			15		10	2.0	5.0		15			

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