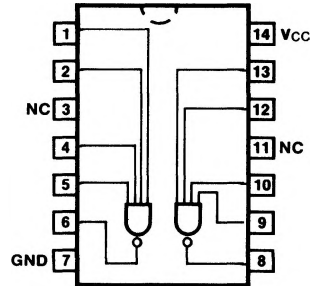


**54/7440**  
**54H/74H40**  
**54S/74S40**  
**54LS/74LS40**  
 DUAL 4-INPUT NAND BUFFER

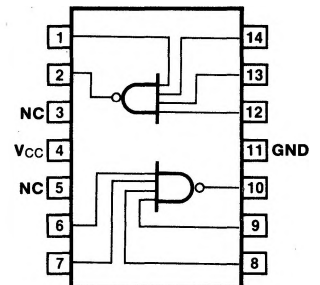
**CONNECTION DIAGRAMS**  
**PINOUT A**



**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	7440PC, 74H40PC 74S40PC, 74LS40PC		9A
Ceramic DIP (D)	A	7440DC, 74H40DC 74S40DC, 74LS40DC	5440DM, 54H40DM 54S40DM, 54LS40DM	6A
Flatpak (F)	A	74S40FC, 74LS40FC	54S40FM, 54LS40FM	3I
	B	7440FC, 74H40FC	5440FM, 54H40FM	

**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	2.5/2.5	2.5/2.5	0.5/0.25
Outputs	30/30	37.5/37.5	70/37.5	30/15 (7.5)

**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>OS</sub>	Output Short Circuit Current	X <sub>C</sub>	-18	-70	-40	-125	-50	-225		mA	V <sub>CC</sub> = Max, V <sub>OUT</sub> = 0 V
		X <sub>M</sub>	-20	-70	-40	-125	-50	-225			
I <sub>CC</sub>	Power Supply Current		8.0		16		18		1.0	mA	V <sub>IN</sub> = Gnd V <sub>IN</sub> = Open
I <sub>CCL</sub>			27		40		44		6.0		
t <sub>PLH</sub>	Propagation Delay		22		12		6.5		24	ns	Figs. 3-1, 3-4
t <sub>PHL</sub>			15		12		6.5		24		

\*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.