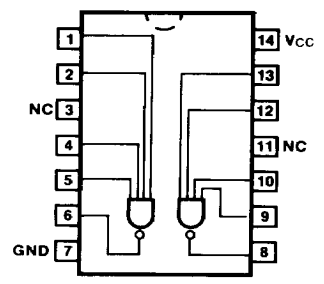


✓ 54/7420 010126  
 ✓ 54H/74H20 010127  
 ✓ 54S/74S20 010131  
 ✓ 54LS/74LS20 010130  
**DUAL 4-INPUT NAND GATE**

**CONNECTION DIAGRAMS  
PINOUT A**

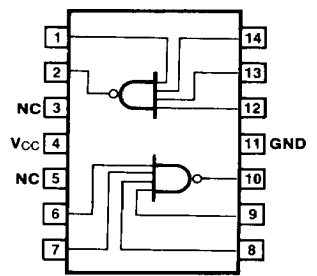


4

**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	7420PC, 74H20PC 74S20PC, 74LS20PC		9A
Ceramic DIP (D)	A	7420DC, 74H20DC 74S20DC, 74LS20DC	5420DM, 54H20DM 54S20DM, 54LS20DM	6A
Flatpak (F)	A	74S20FC, 74LS20FC	54S20FM, 54LS20FM	3I
	B	7420FC, 74H20FC	5420FM, 54H20FM	

**PINOUT B**



**INPUT LOADING/FAN-OUT:** See Section 3 for U.L. definitions

PINS	54/74 (U.L.)	54/74H (U.L.)	54/74S (U.L.)	54/74LS (U.L.)
	HIGH/LOW	HIGH/LOW	HIGH/LOW	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>CC</sub> H	Power Supply Current	4.0	8.4	8.0	0.8	mA	V <sub>IN</sub> = Gnd	V <sub>CC</sub> = Max
I <sub>CC</sub> L	Current	11	20	18	2.2		V <sub>IN</sub> = Open	
t <sub>PL</sub> H	Propagation Delay	22	10	2.0	4.5	ns	Figs. 3-1, 3-4	
t <sub>PH</sub> L		15	10	2.0	5.0			

\*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.