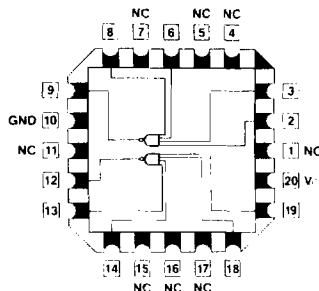


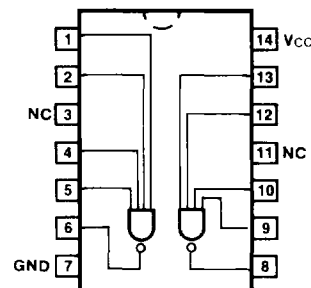
## 54F/74F20

## Dual 4-Input NAND Gate

## Connection Diagrams



**Pin Assignment  
for LCC and PCC**



**Pin Assignment  
for DIP and SOIC**

4

**Ordering Code:** See Section 5

**Input Loading/Fan-Out:** See Section 3 for U.L. definitions

Pin Names	Description	54F/74F(U.L.) HIGH/LOW
	Inputs	0.5/0.375
	Outputs	25/12.5

**DC Characteristics over Operating Temperature Range** (unless otherwise specified)

Symbol	Parameter	54F/74F			Units	Conditions	
		Min	Typ	Max		$V_{IN} = \text{Gnd}$	$V_{CC} = \text{Max}$
$I_{CCH}$	Power Supply Current		0.9	1.4	mA		
$I_{CCL}$			3.4	5.1		$V_{IN} = \text{Open}$	

**AC Characteristics:** See Section 3 for waveforms and load configurations

Symbol	Parameter	54F/74F			54F		74F		Units	Fig. No.
		$T_A = +25^\circ\text{C}$ $V_{CC} = +5.0\text{V}$ $C_L = 50\text{pF}$			$T_A, V_{CC} = \text{Mil}$ $C_L = 50\text{pF}$		$T_A, V_{CC} = \text{Com}$ $C_L = 50\text{pF}$			
		Min	Typ	Max	Min	Max	Min	Max		
$t_{PLH}$ $t_{PHL}$	Propagation Delay	2.4	3.7	5.0	2.0	7.0	2.4	6.0	ns	3-1
		1.5	3.2	4.3	1.5	6.5	1.5	5.3		3-3