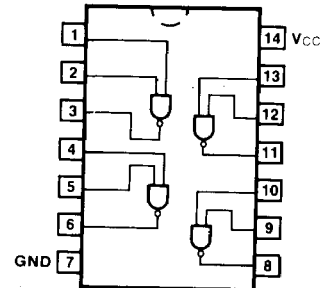


54/7400 ✓ 011065
 54H/74H00 ✓ 011069
 54S/74S00 ✓ 011574
 54LS/74LS00 ✓ 011068

QUAD 2-INPUT NAND GATE

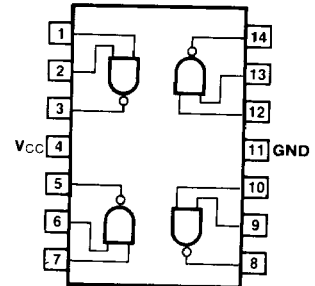
CONNECTION DIAGRAMS PINOUT A



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 | 7400PC, 74H00PC 74LS00PC, 74S00PC | | 9A |
| Ceramic DIP (D) | A | 7400DC, 74H00DC 74LS00DC, 74S00DC | 5400DM, 54H00DM 54LS00DM, 54S00DM | 6A |
| Flatpak (F) | A | 74LS00FC, 74S00FC | 54LS00FM, 54S00FM | 3I |
| | B | 7400FC, 74H00FC | 5400FM, 54H00FM | |

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 | | | |
| I_{CCH} | Power Supply | 8.0 | | 16.8 | | 16 | | 1.6 | | mA | $V_{IN} = \text{Gnd}$ | $V_{CC} = \text{Max}$ |
| I_{CCL} | Current | 22 | | 40 | | 36 | | 4.4 | | | $V_{IN} = \text{Open}$ | |
| t_{PLH} t_{PHL} | Propagation Delay | 22 | | 10 | | 2.0 4.5 | | 10 | | ns | Figs. 3-1, 3-4 | |
| | | 15 | | 10 | | 2.0 5.0 | | 10 | | | | |

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