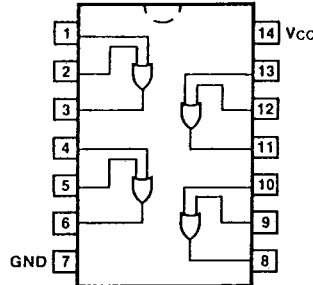


**54/7432**  
**54S/74S32**  
**54LS/74LS32**

**QUAD 2-INPUT OR GATE**

**CONNECTION DIAGRAM**  
**PINOUT A**



**ORDERING CODE:** See Section 9

| PKGS            | PIN OUT | COMMERCIAL GRADE  | MILITARY GRADE  | PKG TYPE |
|-----------------|---------|---|---|----------|
|                 |         | $V_{CC} = +5.0\text{ V} \pm 5\%$ ,<br>$T_A = 0^\circ\text{C to } +70^\circ\text{C}$ | $V_{CC} = +5.0\text{ V} \pm 10\%$ ,<br>$T_A = -55^\circ\text{C to } +125^\circ\text{C}$ |          |
| Plastic DIP (P) | A       | 7432PC, 74S32PC<br>74LS32PC   |   | 9A       |
| Ceramic DIP (D) | A       | 7432DC, 74S32DC<br>74LS32DC   | 5432DM, 54S32DM<br>54LS32DM   | 6A       |
| Flatpak (F)     | A       | 7432FC, 74S32FC<br>74LS32FC   | 5432FM, 54S32FM<br>54LS32FM   | 3I       |

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

| PINS    | 54/74 (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              | 0.5/0.25                |
| Outputs | 20/10                 | 25/12.5                | 10/5.0<br>(2.5)         |

**DC AND AC CHARACTERISTICS:** See Section 3 for U.L. definitions

| SYMBOL    | PARAMETER            | 54/74 |     | 54/74S |     | 54/74LS |     | UNITS | CONDITIONS             |
|-----------|----------------------|-------|-----|--------|-----|---------|-----|-------|------------------------|
|           |                      | Min   | Max | Min    | Max | Min     | Max |       |                        |
| $I_{CCH}$ | Power Supply Current | 22    |     | 32     |     | 6.2     |     | mA    | $V_{IN} = \text{Open}$ |
| $I_{CCL}$ |                      | 38    |     | 68     |     | 9.8     |     |       | $V_{IN} = \text{Gnd}$  |
| $t_{PLH}$ | Propagation Delay    | 15    | 2.0 | 7.0    |     | 15      |     | ns    | Figs. 3-1, 3-5         |
| $t_{PHL}$ |                      | 22    | 2.0 | 7.0    |     | 15      |     |       |                        |

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