

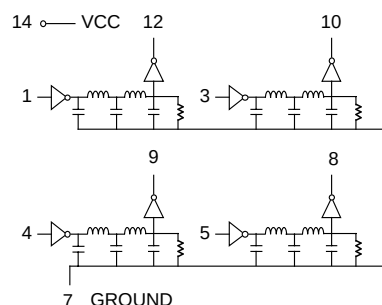
## 14 Pin DIP Quad TTL Compatible Active Delay Lines

| DELAY TIME<br>±5% or ±2 nSt | PART<br>NUMBER | DELAY TIME<br>±5% or ±2 nSt | PART<br>NUMBER | DELAY TIME<br>±5% or ±2 nSt | PART<br>NUMBER |
|-----------------------------|----------------|-----------------------------|----------------|-----------------------------|----------------|
| 5                           | EP9734-5       | 16                          | EP9734-16      | 35                          | EP9734-35      |
| 6                           | EP9734-6       | 17                          | EP9734-17      | 40                          | EP9734-40      |
| 7                           | EP9734-7       | 18                          | EP9734-18      | 45                          | EP9734-45      |
| 8                           | EP9734-8       | 19                          | EP9734-19      | 50                          | EP9734-50      |
| 9                           | EP9734-9       | 20                          | EP9734-20      | 55                          | EP9734-55      |
| 10                          | EP9734-10      | 21                          | EP9734-21      | 60                          | EP9734-60      |
| 11                          | EP9734-11      | 22                          | EP9734-22      | 65                          | EP9734-65      |
| 12                          | EP9734-12      | 23                          | EP9734-23      | 70                          | EP9734-70      |
| 13                          | EP9734-13      | 24                          | EP9734-24      | 75                          | EP9734-75      |
| 14                          | EP9734-14      | 25                          | EP9734-25      |                             |                |
| 15                          | EP9734-15      | 30                          | EP9734-30      |                             |                |

†Whichever is greater. Delay times referenced from input to leading edges at 25°C, 5.0V, with no load.

| DC Electrical Characteristics |                              |                                                                        | Min | Max   | Unit     |
|-------------------------------|------------------------------|------------------------------------------------------------------------|-----|-------|----------|
| Parameter                     | Test Conditions              |                                                                        |     |       |          |
| V <sub>OH</sub>               | High-Level Output Voltage    | V <sub>CC</sub> = min. V <sub>IL</sub> = max. I <sub>OH</sub> = max    | 2.7 |       | V        |
| V <sub>OL</sub>               | Low-Level Output Voltage     | V <sub>CC</sub> = min. V <sub>IH</sub> = min. I <sub>OL</sub> = max    |     | 0.5   | V        |
| V <sub>IK</sub>               | Input Clamp Voltage          | V <sub>CC</sub> = min. I <sub>I</sub> = I <sub>IK</sub>                |     | -1.2V | V        |
| I <sub>IH</sub>               | High-Level Input Current     | V <sub>CC</sub> = max. V <sub>IN</sub> = 2.7V                          |     | 50    | μA       |
|                               |                              | V <sub>CC</sub> = max. V <sub>IN</sub> = 5.25V                         |     | 1.0   | mA       |
| I <sub>IL</sub>               | Low-Level Input Current      | V <sub>CC</sub> = max. V <sub>IN</sub> = 0.5V                          |     | -2    | mA       |
| I <sub>OS</sub>               | Short Circuit Output Current | V <sub>CC</sub> = max. V <sub>OUT</sub> = 0.<br>(One output at a time) | -40 | -100  | mA       |
| I <sub>CCH</sub>              | High-Level Supply Current    | V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN                          |     | 150   | mA       |
| I <sub>CCL</sub>              | Low-Level Supply Current     | V <sub>CC</sub> = max. V <sub>IN</sub> = 0                             |     | 150   | mA       |
| T <sub>RO</sub>               | Output Rise Time             |                                                                        |     | 4     | nS       |
| N <sub>H</sub>                | Fanout High-Level Output     | V <sub>CC</sub> = max. V <sub>OH</sub> = 2.7V                          |     | 20    | TTL LOAD |
| N <sub>L</sub>                | Fanout Low-Level Output      | V <sub>CC</sub> = max. V <sub>OL</sub> = 0.5V                          |     | 10    | TTL LOAD |

### Schematic



| Recommended Operating Conditions |                                | Min  | Max  | Unit |
|----------------------------------|--------------------------------|------|------|------|
| V <sub>CC</sub>                  | Supply Voltage                 | 4.75 | 5.25 | V    |
| V <sub>IH</sub>                  | High-Level Input Voltage       | 2.0  |      | V    |
| V <sub>IL</sub>                  | Low-Level Input Voltage        |      | 0.8  | V    |
| I <sub>IK</sub>                  | Input Clamp Current            |      | -18  | mA   |
| I <sub>OH</sub>                  | High-Level Output Current      |      | -1.0 | mA   |
| I <sub>OL</sub>                  | Low-Level Output Current       |      | 20   | mA   |
| P <sub>W</sub> *                 | Pulse Width of Total Delay     | 40   |      | %    |
| d*                               | Duty Cycle                     |      | 40   | %    |
| T <sub>A</sub>                   | Operating Free-Air Temperature | 0    | +70  | °C   |

*\*These two values are inter-dependent.*

| Input Pulse Test Conditions @ 25° C |                                                 |     | Unit  |
|-------------------------------------|-------------------------------------------------|-----|-------|
| E <sub>IN</sub>                     | Pulse Input Voltage                             | 3.2 | Volts |
| P <sub>W</sub>                      | Pulse Width % of Total Delay                    | 110 | %     |
| T <sub>RI</sub>                     | Pulse Rise Time (0.75 - 2.4 Volts)              | 2.0 | nS    |
| P <sub>RR</sub>                     | Pulse Repetition Rate @ T <sub>d</sub> ≤ 200 nS | 1.0 | MHz   |
|                                     | Pulse Repetition Rate @ T <sub>d</sub> > 200 nS | 100 | KHz   |
| V <sub>CC</sub>                     | Supply Voltage                                  | 5.0 | Volts |

## Package Dimensions

