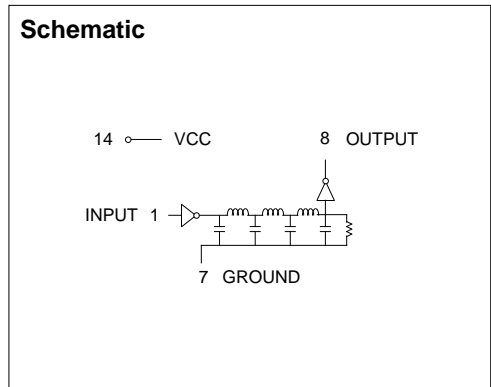


# 14 Pin DIP Single Output TTL Compatible Active Delay Lines

| TIME DELAYS (nS)<br>±5% or ±2 nS† | PART NUMBER | TIME DELAYS (nS)<br>±5% or ±2 nS† | PART NUMBER | TIME DELAYS (nS)<br>±5% or ±2 nS† | PART NUMBER |
|-----------------------------------|-------------|-----------------------------------|-------------|-----------------------------------|-------------|
| 5                                 | EP9430-5    | 23                                | EP9430-23   | 125                               | EP9430-125  |
| 6                                 | EP9430-6    | 24                                | EP9430-24   | 150                               | EP9430-150  |
| 7                                 | EP9430-7    | 25                                | EP9430-25   | 175                               | EP9430-175  |
| 8                                 | EP9430-8    | 30                                | EP9430-30   | 200                               | EP9430-200  |
| 9                                 | EP9430-9    | 35                                | EP9430-35   | 225                               | EP9430-225  |
| 10                                | EP9430-10   | 40                                | EP9430-40   | 250                               | EP9430-250  |
| 11                                | EP9430-11   | 45                                | EP9430-45   | 275                               | EP9430-275  |
| 12                                | EP9430-12   | 50                                | EP9430-50   | 300                               | EP9430-300  |
| 13                                | EP9430-13   | 55                                | EP9430-55   | 350                               | EP9430-350  |
| 14                                | EP9430-14   | 60                                | EP9430-60   | 400                               | EP9430-400  |
| 15                                | EP9430-15   | 65                                | EP9430-65   | 500                               | EP9430-500  |
| 16                                | EP9430-16   | 70                                | EP9430-70   | 600                               | EP9430-600  |
| 17                                | EP9430-17   | 75                                | EP9430-75   | 700                               | EP9430-700  |
| 18                                | EP9430-18   | 80                                | EP9430-80   | 800                               | EP9430-800  |
| 19                                | EP9430-19   | 85                                | EP9430-85   | 900                               | EP9430-900  |
| 20                                | EP9430-20   | 90                                | EP9430-90   | 1000                              | EP9430-1000 |
| 21                                | EP9430-21   | 95                                | EP9430-95   |                                   |             |
| 22                                | EP9430-22   | 100                               | EP9430-100  |                                   |             |

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

| DC Electrical Characteristics |                              |   |     |             |    |
|-------------------------------|------------------------------|---|-----|-------------|----|
| Parameter                     | Test Conditions              | Min   | Max | Unit        |    |
| 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>             |     | -1.2        | 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.                        | -40 | -100        | mA |
| I <sub>CCH</sub>              | High-Level Supply Current    | V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN                       |     | 75          | mA |
| I <sub>CCL</sub>              | Low-Level Supply Current     | V <sub>CC</sub> = max. V <sub>IN</sub> = 0                          |     | 75          | mA |
| T <sub>RO</sub>               | Output Rise Time             | Td 500 nS (0.75 to 2.4 Volts)                                       |     | 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 |    |



| 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   |
| PW*                              | 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 |
| PW                                  | Pulse Width % of Total Delay        |  | 110 | %     |
| T <sub>RI</sub>                     | Pulse Rise Time (0.75 - 2.4 Volts)  |  | 2.0 | nS    |
| PRR                                 | Pulse Repetition Rate @ Td < 200 nS |  | 1.0 | MHz   |
|                                     | Pulse Repetition Rate @ Td > 200 nS |  | 100 | KHz   |
| V <sub>CC</sub>                     | Supply Voltage                      |  | 5.0 | Volts |

