

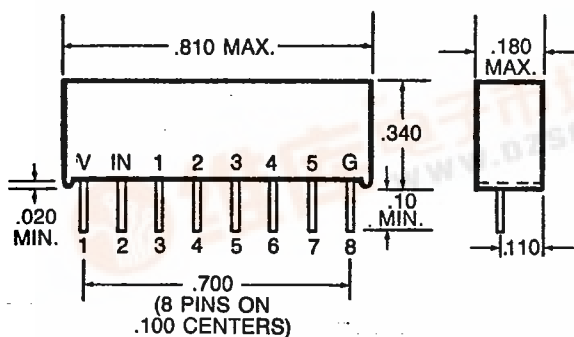
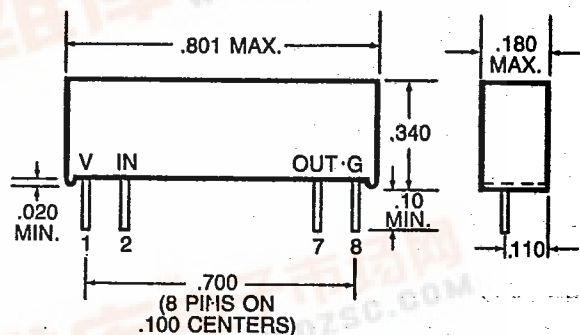
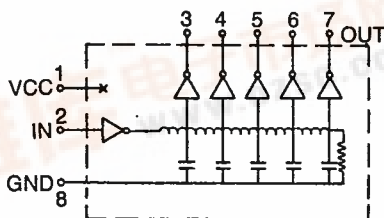
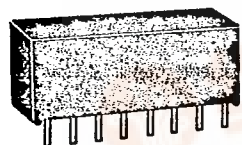
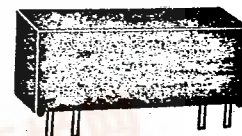
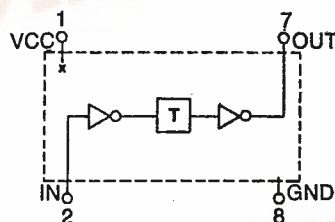
**YCL**

# DIGITAL DELAY LINES

## 8 PIN SINGLE-IN-LINE PACKAGES

### TTL COMPATIBLE

### 5 TAPS AND SINGLE OUTPUT

**SERIES Y05 AND Y01****Y05****Y01**

Intermediate delay values available upon request.

| Model No. | TD (ns) | TD/Tap (ns) |
|-----------|---------|-------------|
| Y05025    | 25      | 5           |
| Y05030    | 30      | 6           |
| Y05035    | 35      | 7           |
| Y05040    | 40      | 8           |
| Y05045    | 45      | 9           |
| Y05050    | 50      | 10          |
| Y05075    | 75      | 15          |
| Y05100    | 100     | 20          |
| Y05150    | 150     | 30          |
| Y05200    | 200     | 40          |
| Y05250    | 250     | 50          |
| Y05300    | 300     | 60          |
| Y05350    | 350     | 70          |
| Y05400    | 400     | 80          |

| Model No. | Delay (ns) |
|-----------|------------|
| Y01010    | 10         |
| Y01025    | 25         |
| Y01030    | 30         |
| Y01035    | 35         |
| Y01040    | 40         |
| Y01050    | 50         |
| Y01075    | 75         |
| Y01100    | 100        |
| Y01150    | 150        |
| Y01200    | 200        |
| Y01250    | 250        |
| Y01300    | 300        |
| Y01350    | 350        |
| Y01400    | 400        |

| DC PARAMETERS   |                                                    | LIMITS                             |       |
|-----------------|----------------------------------------------------|------------------------------------|-------|
|                 |                                                    | Min.                               | Max.  |
| V <sub>oh</sub> | V <sub>cc</sub> = min<br>I <sub>oh</sub> = 1.0mA   | 2.5V                               | —     |
| V <sub>ol</sub> | V <sub>cc</sub> = min<br>I <sub>ol</sub> = 20mA    | —                                  | 0.5V  |
| I <sub>ih</sub> | V <sub>cc</sub> = max<br>V <sub>ih</sub> = 2.7V    | —                                  | 50μA  |
| I <sub>il</sub> | V <sub>cc</sub> = max<br>V <sub>il</sub> = 0.5V    | -2.0mA                             | —     |
| I <sub>i</sub>  | V <sub>cc</sub> = max<br>V <sub>i</sub> = 5.5V     | —                                  | 1.0mA |
| V <sub>i</sub>  | V <sub>cc</sub> = min<br>I <sub>in</sub> = -18 mdc | -1.2vdc                            | —     |
| I <sub>cc</sub> | V <sub>cc</sub> = max<br>outputs low               | Series Y05 70mA<br>Series Y01 55mA |       |

**SPECIFICATIONS:**

- Supply voltage: 5.0VDC  $\pm$  5%
- Delay tolerances:  $\pm$  2ns or  $\pm$  5% wig
- Rise time: 4ns max
- Minimum Pulse Width: 40% of Total delay
- Maximum Duty Cycle: 50%
- Operating temp. range: 0 to 70°C
- Temp. coeff. of delays: 1.0ns  $\pm$  500ppm/°C
- Terminals: Electro tin plated Alloy 42  
.020w x .010th

**TEST CONDITIONS:**

- Temperature: 25°  $\pm$  5°C; V<sub>cc</sub> = 5.0VDC
- Input Pulse Width: 1.2 times the total delay time
- Pulse spacing: 5 times the total delay time
- Input rise time: 2ns; input pulse amplitude 3.0VDC
- All output loaded with 15pF
- Time delays measured at the 1.5 volts level on the leading edges
- Rise time measured from .75 to 2.4V