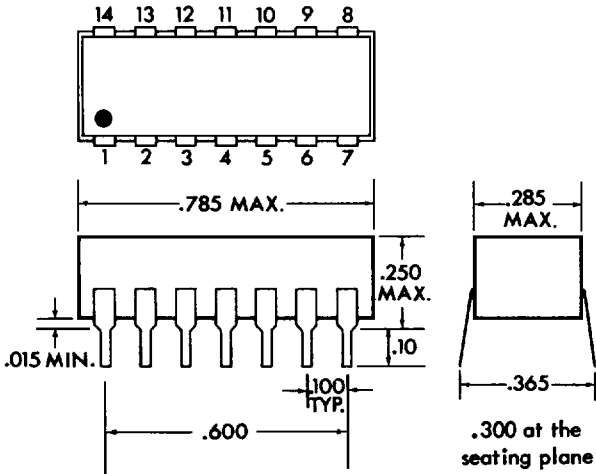


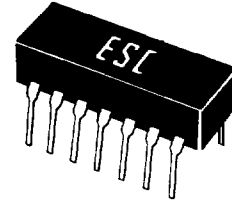


# LOW PROFILE DIGITAL DELAY LINES MACHINE INSERTABLE DIP TTL COMPATIBLE • 14 PIN PACKAGE 5 TAPS • SINGLE • DUAL • TRIPLE

## SERIES 14TD, 14GD, 14DD AND 14PD



White Dot locates Pin 1



ONLY ACTIVE PINS ARE SUPPLIED

Intermediate delay values available upon request.

SERIES 14TD (5 TAP)		
MODEL NO. (Fig. 1)	Delay (ns)	Delay/ Tap(ns)
14TD25	25	5
14TD30	30	6
14TD35	35	7
14TD40	40	8
14TD45	45	9
14TD50	50	10
14TD75	75	15
14TD100	100	20
14TD150	150	30
14TD200	200	40
14TD250	250	50
14TD300	300	60
14TD500	500	100
14TD750	750	150
14TD1000	1000	200

Delay/ line(ns)	MODEL NUMBERS		
	Series 14GD	Series 14DD	Series 14PD
	One output (Fig. 2)	Dual output (Fig. 3)	Triple output (Fig. 4)
5	14GD5	14DD5	14PD5
10	14GD10	14DD10	14PD10
15	14GD15	14DD15	14PD15
20	14GD20	14DD20	14PD20
25	14GD25	14DD25	14PD25
50	14GD50	14DD50	14PD50
75	14GD75	14DD75	14PD75
100	14GD100	14DD100	14PD100
150	14GD150	14DD150	14PD150
200	14GD200	14DD200	14PD200
250	14GD250	14DD250	14PD250
300	14GD300	—	—
400	14GD400	—	—
500	14GD500	—	—
750	14GD750	—	—
1000	14GD1000	—	—

DC PARAMETERS		LIMITS	
		Min.	Max.
$V_{oh}$	$V_{cc} = \min$ $I_{oh} = 1.0 \text{ mA}$	2.5V	—
$V_{ol}$	$V_{cc} = \min$ $I_{ol} = 20 \text{ mA}$	—	0.5V
$I_{ih}$	$V_{cc} = \max$ $V_{ih} = 2.7V$	—	50 $\mu\text{A}$
$I_{il}$	$V_{cc} = \max$ $V_{il} = 0.5V$	-2.0 mA	—
$I_i$	$V_{cc} = \max$ $V_i = 5.5V$	—	1.0 mA
$V_i$	$V_{cc} = \min$ $I_{in} = -18 \text{ mADC}$	-1.2VDC	—
$I_{cc}$	$V_{cc} = \max$ outputs low	Series 14TD 70mA Series 14GD 55mA Series 14DD 100mA Series 14PD 120mA	—

For variations in delay from above listing, modify part number by changing delay.  
Example: 220ns, 14TD series becomes 14TD220.

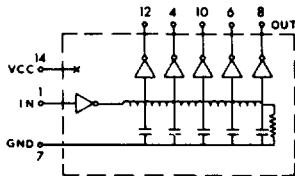


FIG. 1

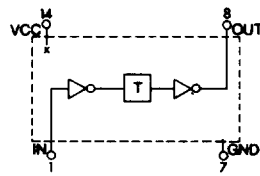


FIG. 2

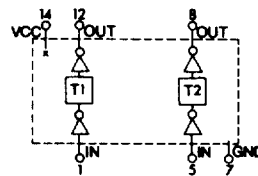


FIG. 3

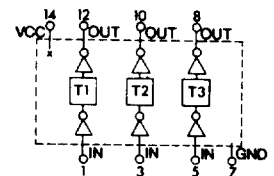


FIG. 4

### SPECIFICATIONS:

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

### TEST CONDITIONS:

- $V_{cc} = 5.0VDC$ , Temp. 25°  $\pm$  5°C
- Time delay measured at the 1.5V level
- Rise time measured from .75V to 2.4V
- All outputs loaded with 15pf
- Input Test Pulse: Pulse voltage: 3.0V  
Pulse rise time: 2ns  
Pulse width: 1.2 x max Td  
Pulse spacing: 5 x max Td