



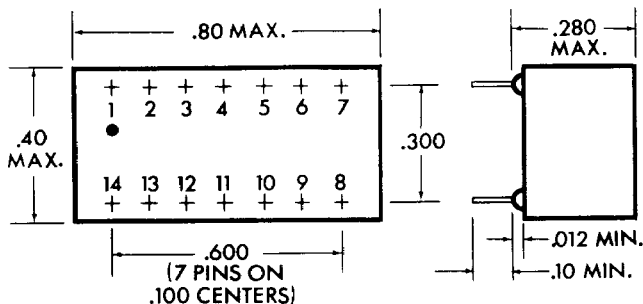
# DIGITAL DELAY LINES

## TTL COMPATIBLE

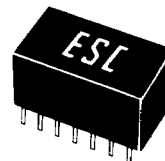
### 5 TAPS • SINGLE • DUAL • TRIPLE

### 14 PIN PACKAGE

SERIES 14T, 14G, 14D AND 14P



White Dot locates Pin 1



ONLY ACTIVE PINS ARE SUPPLIED

Intermediate delay values available upon request.

SERIES 14T (5 TAP)		
MODEL NO. (Fig. 1)	Delay ns	Delay/Tap ns
14T25	25	5
14T30	30	6
14T35	35	7
14T40	40	8
14T45	45	9
14T50	50	10
14T60	60	12
14T75	75	15
14T100	100	20
14T125	125	25
14T200	200	40
14T250	250	50
14T300	300	60
14T400	400	80
14T500	500	100
14T750	750	150
14T1000	1000	200

Delay/ line (ns)	MODEL NUMBERS		
	Series 14G	Series 14D	Series 14P
	One output (Fig. 2)	Dual output (Fig. 3)	Triple output (Fig. 4)
5	14G5	14D5	14P5
10	14G10	14D10	14P10
15	14G15	14D15	14P15
20	14G20	14D20	14P20
25	14G25	14D25	14P25
50	14G50	14D50	14P50
75	14G75	14D75	14P75
100	14G100	14D100	14P100
150	14G150	14D150	14P150
200	14G200	14D200	14P200
250	14G250	14D250	14P250
300	14G300	—	—
400	14G400	—	—
500	14G500	—	—
750	14G750	—	—
1000	14G1000	—	—

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 14T Series 14G Series 14D Series 14P	70mA 55mA 100mA 120mA

For variations in delay from above listing, modify part number by changing delay.  
Example: 220ns, 14T series becomes 14T220.

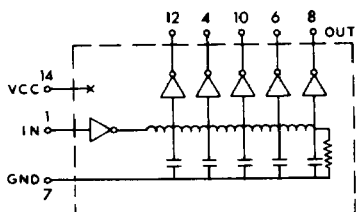


FIG. 1

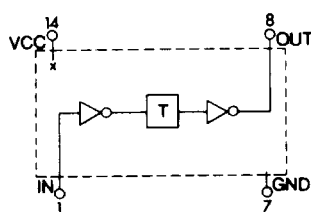


FIG. 2

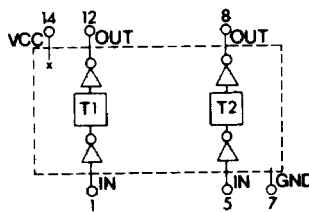


FIG. 3

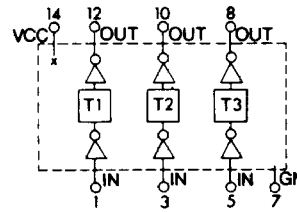


FIG. 4

**SPECIFICATIONS:**

- Supply voltage: 5.0VDC  $\pm$  10%
- 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

\* Available for -55°C to +125°C operation. Specify series 14TC, 14GC, 14DC, or 14PC.  
Dimensions will change to .285W x .360H x .820L.