

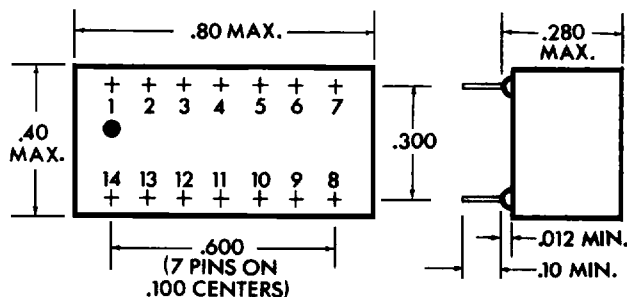


# LOW POWER SCHOTTKY DIGITAL DELAY LINES

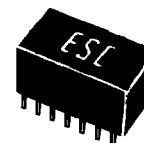
## TTL COMPATIBLE • 14 PIN PACKAGE

### 5 TAPS • SINGLE • DUAL • TRIPLE

**SERIES 14LT, 14LG, 14LD AND 14LP**



White Dot locates Pin 1



ONLY ACTIVE PINS ARE SUPPLIED

Intermediate delay values available upon request.

Series 14LT(5 TAP)		
Model No. (Fig. 1)	Delay ns	Delay/Tap ns
14LT30	30	6
14LT35	35	7
14LT40	40	8
14LT45	45	9
14LT50	50	10
14LT60	60	12
14LT75	75	15
14LT100	100	20
14LT125	125	25
14LT200	200	40
14LT250	250	50
14LT300	300	60
14LT400	400	80
14LT500	500	100

Delay/line(ns)	MODEL NUMBERS		
	Series 14LG	Series 14LD	Series 14LP
	One output (Fig. 2)	Dual output (Fig. 3)	Triple output (Fig. 4)
10	14LG10	14LD10	14LP10
15	14LG15	14LD15	14LP15
20	14LG20	14LD20	14LP20
25	14LG25	14LD25	14LP25
30	14LG30	14LD30	14LP30
35	14LG35	14LD35	14LP35
40	14LG40	14LD40	14LP40
50	14LG50	14LD50	14LP50
60	14LG60	14LD60	14LP60
70	14LG70	14LD70	14LP70
75	14LG75	14LD75	14LP75
100	14LG100	14LD100	14LP100
200	14LG200	14LD200	14LP200
250	14LG250	14LD250	14LP250
300	14LG300	—	—
400	14LG400	—	—
500	14LG500	—	—

DC PARAMETERS		LIMITS	
		Min.	Max.
$V_{oh}$	$V_{cc} = \min$ $I_{oh} = -0.40\text{mA}$	2.5V	—
$V_{ol}$	$V_{cc} = \min$ $I_{ol} = 8.0\text{mA}$	—	0.5V
$I_{th}$	$V_{cc} = \max$ $V_{th} = 2.7\text{V}$	—	20 $\mu\text{A}$
$I_{il}$	$V_{cc} = \max$ $V_{il} = 0.40$	-0.40mA	—
$I_i$	$V_{cc} = \max$ $V_{il} = 5.5\text{V}$	—	0.10mA
$V_i$	$V_{cc} = \min$ $I_{in} = -18\text{mA}$	-1.5vdc	—
$I_{cc}$	$V_{cc} = \max$ outputs low	Series 14LT Series 14LG Series 14LD Series 14LP	25mA 12mA 22mA 32mA

For variations in delay from above listing, modify part number by changing delay.  
Example: 220ns, 14LT series becomes 14LT220.

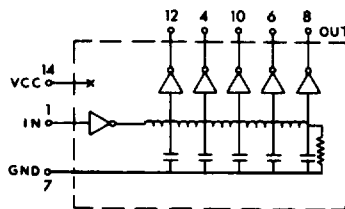


FIG. 1

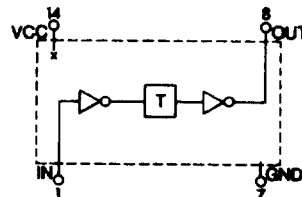


FIG. 2

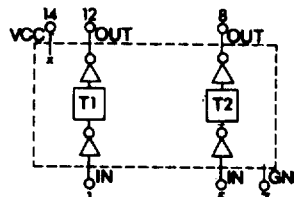


FIG. 3

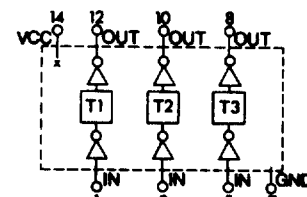


FIG. 4

#### SPECIFICATIONS:

- Supply voltage: 5.0VDC  $\pm$  5%
- Delay tolerances:  $\pm$  2ns or  $\pm$  5% whichever is greater
- Rise time: 8.0ns max
- Minimum Pulse Width: 40% of Total Delay
- Maximum Duty Cycle: 50%
- \* ● Operating temp. range: 0°C to 70°C
- Temp. coeff. of delay: 1.0ns + 1000ppm/°C
- Terminals: Electro tin plated alloy 42 .020w x .010th

#### TEST CONDITIONS:

- $V_{cc} = 5.0\text{VDC}$ ; 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 14LTC, 14LGC, 14LDC, or 14LPC.  
Dimensions will change to .400W x .350H x .820L.