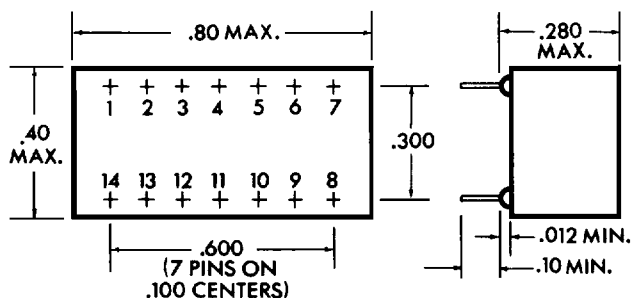


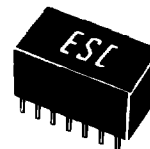


FAST TTL LOGIC DELAY LINES 14 PIN PACKAGE 5 TAPS • SINGLE • DUAL • TRIPLE

SERIES 14FT, 14FG, 14FD AND 14FP



White Dot locates Pin 1



ONLY ACTIVE PINS ARE SUPPLIED

Intermediate delay values available upon request.

SERIES 14FT (5 TAP)		
Model No. (Fig. 1)	Time Delay (nsec)	Delay/Tap (nsec)
14FT25	25	5
14FT30	30	6
14FT35	35	7
14FT40	40	8
14FT45	45	9
14FT50	50	10
14FT75	75	15
14FT100	100	20
14FT150	150	30
14FT200	200	40
14FT250	250	50
14FT300	300	60
14FT500	500	100

Delay/ Line (ns)	MODEL NUMBERS		
	Series 14FG	Series 14FD	Series 14FP
	One output (Fig. 2)	Dual output (Fig. 3)	Triple output (Fig. 4)
25	14FG25	14FD25	14FP25
30	14FG30	14FD30	14FP30
35	14FG35	14FD35	14FP35
40	14FG40	14FD40	14FP40
45	14FG45	14FD45	14FP45
50	14FG50	14FD50	14FP50
75	14FG75	14FD75	14FP75
100	14FG100	14FD100	14FP100
150	14FG150	14FD150	14FP150
200	14FG200	14FD200	14FP200
250	14FG250	14FD250	14FP250
300	14FG300	—	—
500	14FG500	—	—

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_{th}	$V_{cc} = \max$ $V_{th} = 2.7V$	—	20 μA
I_{il}	$V_{cc} = \max$ $V_{il} = 0.5V$	-1.6mA	—
I_i	$V_{cc} = \max$ $V_i = 5.5V$	—	100 μA
V_i	$V_{cc} = \min$ $I_{in} = 18 \text{ mdc}$	-1.2vdc	—
I_{cc}	$V_{cc} = \max$ outputs low	Series 14FT 50mA Series 14FG 43mA Series 14FD 80mA Series 14FP 110mA	

For variations in delay from above listing, modify part number by changing delay.

Example: 400ns, 14FT series becomes 14FT400.

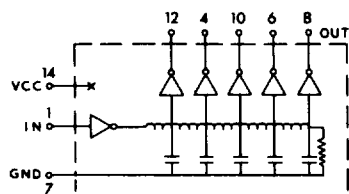


FIG. 1

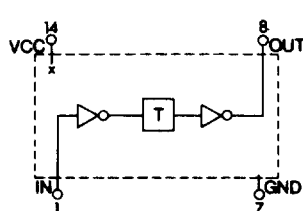


FIG. 2

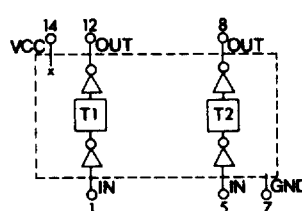


FIG. 3

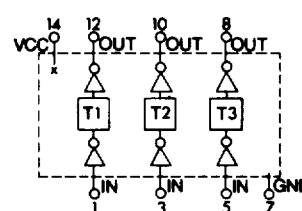


FIG. 4

SPECIFICATIONS:

- Supply voltage: 5.0VDC $\pm 5\%$
- Delay tolerances: $\pm 2\text{ns}$ or $\pm 5\%$ wig
- Rise Time: 3ns max
- Minimum Pulse Width: 40% of Total delay
- Maximum Duty Cycle: 50%
- * Operating temp. range: 0°C to $+70^\circ\text{C}$
- Temp. coeff. of delay: 1.0ns + 500ppm/ $^\circ\text{C}$
- Terminals: Electro tin plated alloy 42 .020w x .010th

TEST CONDITIONS:

- $V_{cc} = 5.0\text{VDC}$, Temp. $25^\circ \pm 5^\circ\text{C}$
- 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

* The Digital Delay Line series is supplied in two versions:

14FT, 14FG, 14FD, & 14FP Series:

Employs plastic packaged IC for an operating temperature range 0° to 70°C .

14FTC, 14FGC, 14FDC, & 14FPC Series:

Manufactured with ceramic packaged IC's which have been tested & screened to MIL-STD-883 for operating temperature range -55°C to $+125^\circ\text{C}$. The dimensions of this series will increase to .360H x .820L