



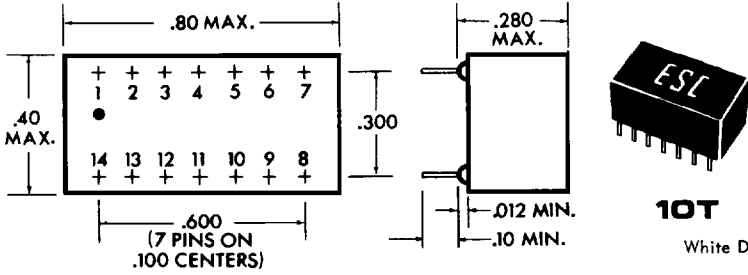
DIGITAL DELAY LINES

TTL COMPATIBLE • 14 PIN PACKAGE

10 TAPS

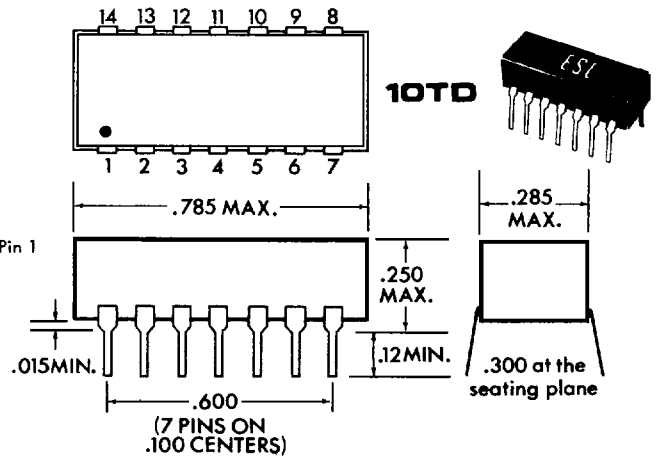
ALL TYPES AVAILABLE IN LP SCHOTTKY
AS SERIES 10T, 10TD AND 10SGT

SERIES 10T, 10TD AND 10SGT

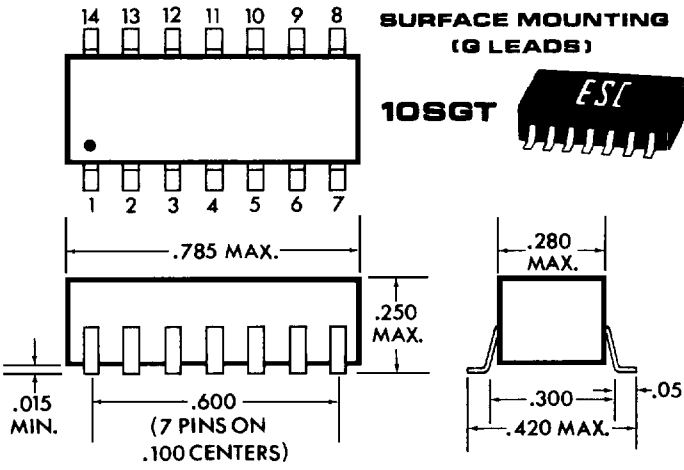


10T
White Dot locates Pin 1

MACHINE INSERTABLE LOW PROFILE DIP

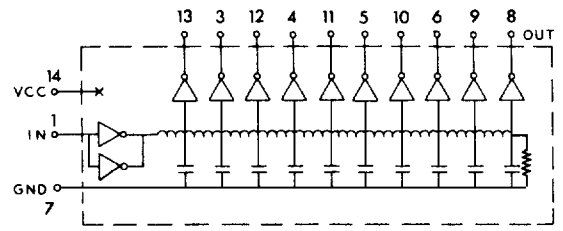


10TD



SURFACE MOUNTING (G LEADS)

10SGT



Intermediate delay values available upon request.

| Model Nos. | | | Delay (ns) | Delay/Tap (ns) |
|------------|-------------|--------------|------------|----------------|
| Series 10T | Series 10TD | Series 10SGT | | |
| 10T50 | 10TD50 | 10SGT50 | 50 | 5 |
| 10T60 | 10TD60 | 10SGT60 | 60 | 6 |
| 10T70 | 10TD70 | 10SGT70 | 70 | 7 |
| 10T80 | 10TD80 | 10SGT80 | 80 | 8 |
| 10T90 | 10TD90 | 10SGT90 | 90 | 9 |
| 10T100 | 10TD100 | 10SGT100 | 100 | 10 |
| 10T200 | 10TD200 | 10SGT200 | 200 | 20 |
| 10T250 | 10TD250 | 10SGT250 | 250 | 25 |
| 10T300 | 10TD300 | 10SGT300 | 300 | 30 |
| 10T350 | 10TD350 | 10SGT350 | 350 | 35 |
| 10T400 | 10TD400 | 10SGT400 | 400 | 40 |
| 10T450 | 10TD450 | 10SGT450 | 450 | 45 |
| 10T500 | 10TD500 | 10SGT500 | 500 | 50 |
| 10T750 | 10TD750 | 10SGT750 | 750 | 75 |
| 10T1000 | 10TD1000 | 10SGT1000 | 1000 | 100 |

| 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 μA |
| 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 | — | 140 mA |

For variations in delay from above listing, modify part number by changing delay. Example: 375ns, 10SGT series becomes 10SGT375

SPECIFICATIONS:

- Supply voltage: 5.0VDC \pm 10%
- Delay tolerances: \pm 2ns or \pm 5% wig
- Rise time: 4ns max
- Minimum pulse width: 20% of Total Delay
- Maximum duty cycle: 50%
- * ● Operating temp. range: 0°C to +70°C
- Temp. coeff. of delay: 1.0ns + 500ppm/°C
- Terminals: .020w x .010th, alloy 42

TEST CONDITIONS:

- Temperature: 25° \pm 5°C, V_{cc} =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 outputs loaded with 15pf
- Time delays measured at the 1.5 volts level on the leading edges
- Rise time measured from .75 to 2.4V

* ESC can also supply the 10T Series with ceramic IC's that have been screened to MIL-STD-883 for -55°C to +125°C operation. The height will increase to .32 inches. When specifying, add letter "C" after "T". Example: 10T50 converts to 10TC50.