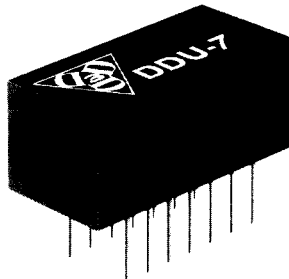


Digital Delay Units

SERIES DDU-7

**10 Taps (14 pins DIP)
T²L Interfaced**

**data
delay
devices, inc.**



(Military Type)

Features:

- Completely interfaced for TTL and DTL application
- No external components required
- P.C. board space economy achieved
- Fits standard 14 pins DIP socket
- Operates over full military temperature range

Specifications:

- **No. Taps:** 10 equally spaced taps
- **Total Delay Tolerance:** $\pm 5\%$ or better, or 2 NS whichever is greater.
- **Rise-time:** 4 NS typically
- **Temperature coefficient:** 100 PPM/ $^{\circ}\text{C}$
- **Temperature range:** -55°C to $+125^{\circ}\text{C}$
- **Supply voltage:** 4.5 to 5.5 Vdc.
- **Logic 1 input current:** 100 μa max.
- **Logic 0 input current:** -4 ma. max.
- **Logic 1 V out:** 2.5 V min.
- **Logic 0 V out:** 0.5 V max.
- **Logic 1 Fan-out:** 20/tap max.
- **Logic 0 Fan-out:** 10/tap max.
- **Power Dissipation:** 740 MW max.

Test Conditions:

- Input Pulse Width: $\geq 150\%$ of total delay.
- Time delay measured @ 1.5 V on rising edge.
- Unless otherwise specified all time-delays are referenced to input of delay line.
- Rise-time is measured from .75 V to 2.4 V of leading edge.
- All measurements made @ $V_{CC} = 5\text{V}$; $T_A = -25^{\circ}\text{C}$.

| Part No. | Total Delay NS | Delay Per Tap NS |
|-----------|----------------|------------------|
| *DDU-7-10 | 9 | 1 $\pm .4$ |
| *DDU-7-20 | 18 | 2 $\pm .5$ |
| *DDU-7-25 | 22.5 | 2.5 $\pm .7$ |
| *DDU-7-50 | 45 | 5.0 ± 1.5 |
| DDU-7-100 | 100 | 10.0 ± 2.0 |
| DDU-7-150 | 150 | 15.0 ± 2.0 |
| DDU-7-200 | 200 | 20.0 ± 2.0 |
| DDU-7-250 | 250 | 25.0 ± 2.0 |
| DDU-7-300 | 300 | 30.0 ± 3.0 |
| DDU-7-400 | 400 | 40.0 ± 4.0 |
| DDU-7-500 | 500 | 50.0 ± 5.0 |

*Time delay referenced to 1st tap. Two (2) gates in parallel for input buffer. 6 NS \pm 1 NS inherent delay.

