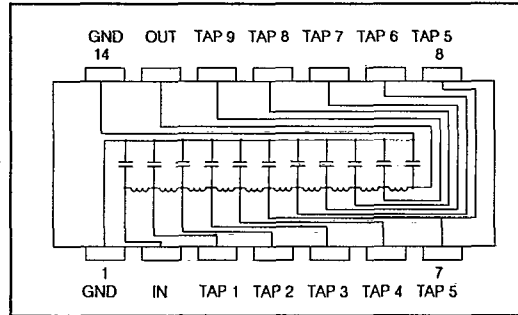


- Lumped constant
- Low profile
- TTL and DTL compatible
- Low distortion and low attenuation
- High reliability
- Auto insertable

**STANDARD PIN-OUT (CODE E)**



**description**

The 11A series of Delay Lines are constructed from passive, lumped-constant components forming a delay line ladder. Up to 10 equally spaced delay taps are available in a low profile 14 pin dual-in-line package particularly suitable for high-density board designs. No termination resistor is included which allows for series connection of a number of delay lines for unequal tap designs. Direct drive from TTL and DTL is easily achieved with a minimum of design know-how.

**absolute maximum ratings over operating free-air temperature range**

Temperature coefficient of delay . . . . .	±100ppm/C
Operating free-air temperature range . . . . .	.0C to 70C
Storage temperature range . . . . .	−55C to 125C
Operating voltage . . . . .	50V DC
Characteristic impedance $Z_0$ . . . . .	±10% of nominal
Distortion . . . . .	±10%
Insulation resistance . . . . .	.1000 MΩ min at 50V DC
Dielectric strength . . . . .	50V DC
Total delay/rise time ratio . . . . .	.6 : 1
Min. pulse width as % of total delay . . . . .	.40%
Input pulse repetition rate PRR . . . . .	3 x pulse width min.
Lead temperature 1.5mm from case for 10 seconds . . . . .	300C

**11A Series**  
**10 Tap 14 Pin DIL Package**

**delay characteristics Ta = 25C, input test pulse voltage 3V, pulse width 3 x total delay, rise time 3ns, delay line termination ±1% of nominal Zo.**

delay tolerance from input to tap ±2ns or ±5% whichever is greater

**11A Series 10 Tap 14 Pin DIL Package style C**

<b>PART No. (1)</b>	<b>TOTAL DELAY (ns) ±5% (2)</b>	<b>TAP TO TAP DELAY (ns) ±10% (3)</b>	<b>RISE TIME (ns) max.</b>	<b>ATTENUATION (%) MAX.</b>
11ACB10012E	10	1	3	5
11ACB20012E	20	2	4.5	5
11ACB30012E	30	3	6	5
11ACB40012E	40	4	7	5
11ACB50012E	50	5	8.5	5
11ACB60012E	60	6	10	5
11ACB75012E	75	7.5	12.5	5
11ACB10112E	100	10	17	5
11ACB12112E	120	12	20	5
11ACB15112E	150	15	25	5
11ACB18112E	180	18	30	5
11ACB20112E	200	20	34	5
11ACB25112E	250	25	42	5
11ACB30112E	300	30	50	5
11ACB50112E	500	50	85	8

- (1) For 100Ω impedance parts
- (2) or ±2ns whichever is greater,
- (3) or ±1 ns whichever is greater,

Note: Other impedances and pinouts are available to special order.  
 Delays measured between 50% points on leading edges of input and output signals.

