

DESIGN NOTES (continued)

shown on page 3. Tolerances on minimum delay, delay change per step and deviation from programmed delay are shown in the Part Number Table on page 3.

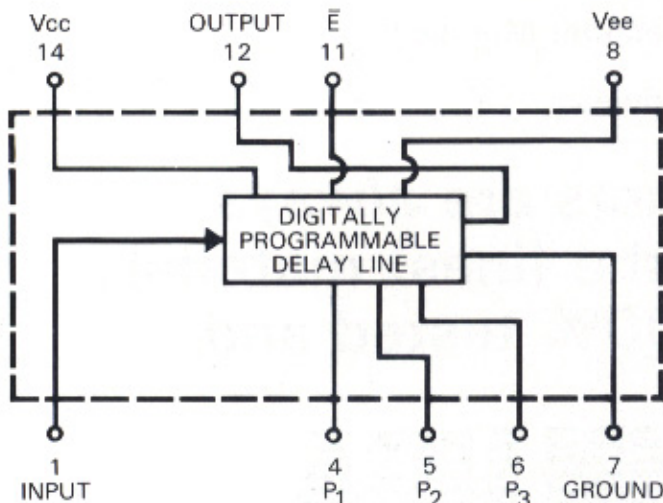
Delay time is measured at the 0 volt level on the leading edge. Temperature coefficient of delay is less than 100 ppm/°C over the operating temperature range of -40 to +85°C.

The PADL is designed for use with analog input signals between -5 and +5 volts and will reproduce them at the output without inversion. Input impedance is 100 ± 10 ohms. Output impedance is 170 ohms typical. The -3dB bandwidth is given in the Part Number Table on page 3. In general, shorter delays will correspond to increased line bandwidth.

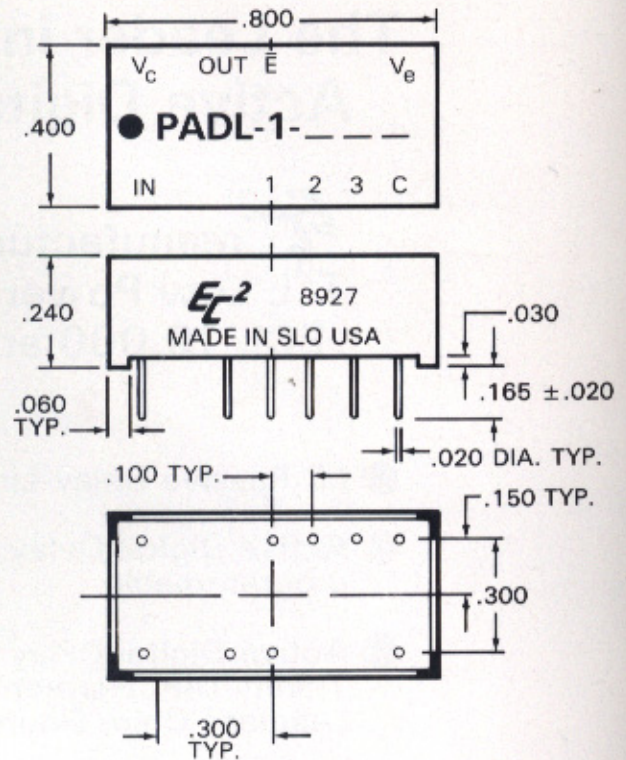
These "DIP Series" Programmable Analog Delay Lines are packaged in a 14-pin DIP housing, molded of flame-proof Diallyl Phthalate per MIL-M-14, Type SDG-F and are fully encapsulated in epoxy resin. Leads meet the solderability requirements of MIL-STD-202, Method 208. Corner standoffs on the housing provide positive standoff from the printed circuit board to permit solder-fillet formation and flush cleaning of solder-flux residues for improved reliability.

Marking consists of manufacturer's name, logo (EC²), part number, terminal identification and date code of manufacture. All marking is applied by silk screen process using white epoxy paint in accordance with MIL-STD-130, to meet the permanency of identification required by MIL-STD-202, Method 215.

BLOCK DIAGRAM IS SHOWN BELOW



MECHANICAL DETAIL IS SHOWN BELOW



TEST CONDITIONS

1. All measurements are made at 25°C.
2. V_{CC} supply voltage is maintained at 5.0V DC.
3. V_{EE} supply voltage is maintained at -5.0V DC.
4. All units are tested with a 10 Mhz sine wave.
5. Output is loaded with 100K ohms to ground.

OPERATING SPECIFICATIONS

- * V_{CC} supply voltage: 4.75 to 5.25V DC
- * V_{EE} supply voltage: -2.0 to -5.25V DC
- V_{EE} to V_{CC} voltage: 10.0V DC max.
- Supply current: < 1 ma typical
- Input impedance: 100 ohms $\pm 10\%$
- Programming and enable pins:
 - Low level input voltage 2.0V min.
 - High level input voltage: 0.8V max.
 - Input leakage current 1 ua max.
- Operating temperature range: -40 to +85°C.
- Storage temperature: -55 to +125°C.

*For proper operation of the delay line, analog input voltages should not exceed the V_{EE} or V_{CC} supplies.