

# 10k ECL Programmable Delay Lines

## GECLPG

- 10k ECL logic levels.
- 3-bit binary gives 7 equal step delays.
- Available in 10 step delays from 1 ns to 10 ns.
- Low inherent delay (To); To=3.0+1.5 ns
- Temperature range: -30 to +85°C.
- **Fanout: 70 ECL loads.**
- MX model designates military models with temperature range -55 to +125°C and ceramic package IC screened to MIL-STD-883C and 38510.
- Military models as "MX" above, but in-house burn-in and thermal shock, add suffix "MY."

TECHNITROL PART NO.	Step Delay ns ± ns	Max. Delay ns ± ns	Output Rise Time Max. (ns)
GECLPG301MX	1.0 ± .4	$10.0 \pm 1.5$	3.6
GECLPG302MX	2.0 ± .6	$17.0 \pm 1.5$	3.6
GECLPG303MX	3.0 ± 1.0	$24.0 \pm 1.5$	3.6
GECLPG304MX	4.0 ± 1.0	31.0 ± 2.0	3.6
GECLPG305MX	5.0 ± 1.5	38.0 ± 2.0	3.6
GECLPG306MX	$6.0 \pm 1.5$	45.0 ± 2.5	3.6
GECLPG307MX	7.0 ± 1.5	52.0 ± 2.5	3.6
GECLPG308MX	8.0 ± 1.5	59.0 ± 3.0	3.6
GECLPG309MX	9.0 ± 1.5	$66.0 \pm 3.5$	3.6
GECLPG310MX	10.0 ± 1.5	73.0 ± 3.0	3.6

### MODEL GECLDL PROGRAMMABLE DELAY LINES

**■** Delay Characteristics measured at  $V_{CC} = -5.2V \pm .01$  Vdc.  $T_a = 25^{\circ}$  C, no load.

■ Delay Tolerance ±1.5 ns or 5%, whichever is greater.

Delay time measured @ -1.3V.

■ 500 linear FPM airflow and output terminated with 50 ohm to -2.0 Vdc.

- Rise time measured from 20 to 80% of output pulse.
- For minimum input pulse width -- contact factory.

Input is internally terminated, therefore the delay line driver does not require a pulldown resistor.

### **SCHEMATIC**



NOTE: ALL UNUSED PINS SHALL HAVE NO ELECTRICAL OR CAPACITIVE TYPE OF CONNECTION.

#### **MECHANICAL OUTLINE**



GECLPG-20



#### Notes

- Pin numbers shown are for reference only and are not necessarily marked on unit.
- Lead material is electro tin plated (alloy 42) or solder dipped.
- All specifications are subject to change without notice.