

## DIGITAL DELAY LINE SERIES 0451 ECL 10K PROGRAMMABLE LOGIC DELAY MODULE 3 BIT

### TECHNICAL INFORMATION

#### TEST CONDITIONS

Driving Signal ECL 10K Buffer  
Pulse Width  $1.5 \times$  Total Delay  
Pulse Period 1000 Nsec  
Supply Voltage, Vee - 5.2 Volts  
Output Terminations 50 Ohm  
 $\pm 1\%$  to - 2 Volts  
Ambient Temperature 25°C

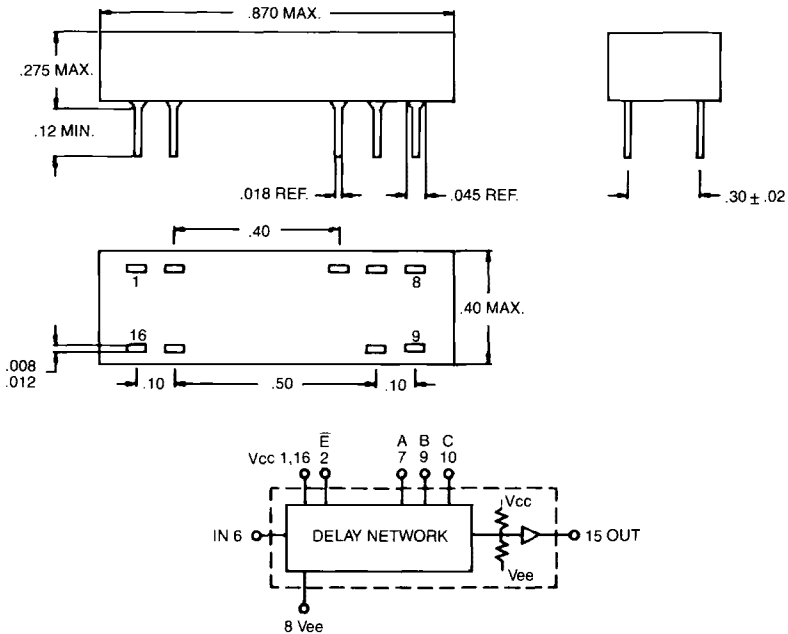
#### PERFORMANCE CHARACTERISTICS

Delay Tolerances  
As Specified in Table  
Performance Characteristics apply to  
above listed Test Conditions.

#### ELECTRICAL CHARACTERISTICS

Supply Voltage, Vee  
- 4.94 To - 5.46 Volts  
Logic 1 Input Voltage  
- 0.98 Volts min.  
Logic 1 Output Voltage  
- 0.96 Volts min.  
Logic 0 Input Voltage  
- 1.63 Volts max.  
Logic 0 Output Voltage  
- 1.65 Volts max.  
Enable Input, High  
265 Microamp max.  
Enable Input, Low  
0.5 Microamp min.  
Input Impedance  
100 Ohm  $\pm 5\%$   
Operating Temperature Range  
- 30°C To 85°C  
Temperature Coefficient Of Total Delay  
150PPM/°C Typical

—Compatible with ECL 10K circuits  
—Other delays and tolerances upon  
request



Part Number	*Min. Delay (Nom.)	**Max. Delay (Nom.)	$\Delta$ Delay / Step	Total Programmable Delay and its Tolerance
0451-0010-03	3NS	10NS	1 $\pm$ .3NS	7 $\pm$ .4NS
0451-0017-03	3NS	17NS	2 $\pm$ .4NS	14 $\pm$ .6NS
0451-0024-03	3NS	24NS	3 $\pm$ .5NS	21 $\pm$ .8NS
0451-0031-03	3NS	31NS	4 $\pm$ .5NS	28 $\pm$ .9NS
0451-0038-03	3NS	38NS	5 $\pm$ .5NS	35 $\pm$ 1NS
0451-0045-03	3NS	45NS	6 $\pm$ .6NS	42 $\pm$ 1.2NS
0451-0052-03	3NS	52NS	7 $\pm$ .7NS	49 $\pm$ 1.4NS
0451-0059-03	3NS	59NS	8 $\pm$ .8NS	56 $\pm$ 1.6NS
0451-0066-03	3NS	66NS	9 $\pm$ .9NS	63 $\pm$ 1.8NS
0451-0073-03	3NS	73NS	10 $\pm$ 1.0NS	70 $\pm$ 2.0NS

1 Delays measured at 50% of the pulse on leading edge only.

#### CONTROL SIGNAL TABLE

C	B	A
0	0	0 *
0	0	1
0	1	0
0	1	1
1	0	0
1	0	1
1	1	0
1	1	1 **

\* Minimum Delay Code  
\*\* Maximum Delay Code

Specifications Subject To Change Without Notice