bel/ defining a degree of excellence

DIGITAL DELAY LINE SERIES 0451 ECL 10K PROGRAMMABLE LOGIC DELAY MODULE 4 BIT

TECHNICAL INFORMATION

TEST CONDITIONS

Logic 1	— 0.9 Volts
Logic 0	— 1.8 Volts
Rise Time 20% to 80%	2.0 Nsec
Pulse Width	1.5 × Total Delay
Pulse Period	1000 Nsec
Supply Voltage, Vee	— 5.2 Volts
Output Termination	100 Ohm ±1% to — 2 Volts
Ambient Temperature	25°C

PERFORMANCE CHARACTERISTICS

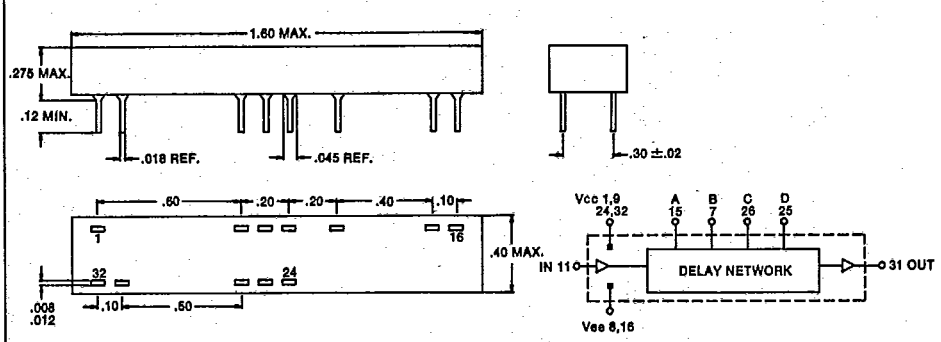
Logic 1 Input Voltage
— 0.98 Volts min.
Logic 1 Input Current
440 Microamp max.
Logic 1 Output Voltage
— 0.96 Volts min.
Logic 0 Input Voltage
— 1.63 Volts max.
Logic 0 Input Current
1 Microamp min.
Logic 0 Output Voltage
— 1.65 Volts max.

All specified Performance Characteristics apply at above listed Test Conditions. Variations of input pulse width or duty cycle from those specified as test conditions may change specified tolerances.

ELECTRICAL CHARACTERISTICS

Supply Voltage, Vee
— 4.94 To — 5.46 Volts
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 1	** Max. Delay (Nom.) 1	ΔDelay /Step 1	Total Programmable Delay and its Tolerance 1
0451-0025-04	10 ± 1NS	25NS	1 ± .4NS	15 ± .8NS
0451-0040-04	10 ± 1NS	40NS	2 ± .5NS	30 ± 1.2NS
0451-0055-04	10 ± 1NS	55NS	3 ± .5NS	45 ± 1.6NS
0451-0070-04	10 ± 1NS	70NS	4 ± .6NS	60 ± 1.8NS
0451-0085-04	10 ± 1NS	85NS	5 ± .6NS	75 ± 2.0NS
0451-0100-04	10 ± 1NS	100NS	6 ± .8NS	90 ± 2.4NS
0451-0115-04	10 ± 1NS	115NS	7 ± .8NS	105 ± 2.8NS
0451-0130-04	10 ± 1NS	130NS	8 ± 1NS	120 ± 3.2NS
0451-0145-04	10 ± 1NS	145NS	9 ± 1NS	135 ± 3.6NS
0451-0160-04	10 ± 1NS	160NS	10 ± 1NS	150 ± 4.2NS

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

CONTROL SIGNAL TABLE

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

16 STEPS

* Minimum Delay Code
** Maximum Delay Code

Specifications Subject To Change Without Notice