

DIGITAL DELAY LINE SERIES 0449 TTL PROGRAMMABLE LOGIC DELAY MODULE 4 BIT

TECHNICAL INFORMATION

TEST CONDITIONS

Pulse Voltage 3.2 Volts
Rise Time 3.0 Nsec (10%-90%)
Pulse Width $1.5 \times$ Maximum Delay
Pulse Period $5 \times$ Pulse Width
Supply Current 100.0 Milliamps max.
Supply Voltage, Vcc 5.0 Volts
Ambient Temperature 25°C

PERFORMANCE CHARACTERISTICS

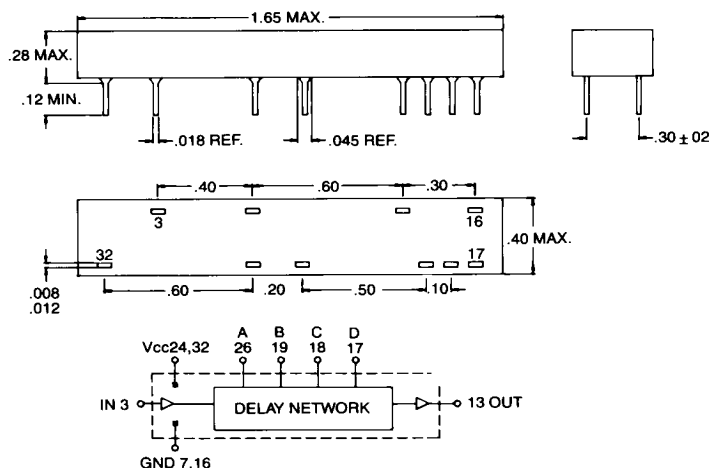
Programmable Delay Tolerance
 ± 2 Nsec or 5% whichever is greater
Performance Characteristics apply at above listed Test conditions.

ELECTRICAL CHARACTERISTICS

Supply Voltage, Vcc
4.75 to 5.25 Volts
Logic 1 Input Voltage
2.0 Volts min.
Logic 0 Input Voltage
.8 Volts max.
Logic 1 Output Voltage
2.7 Volts min.
Logic 0 Output Voltage
0.5 Volts max.
Operating Temperature Range
0°C To 70°C
Temperature Coefficient Of Total Delay
500PPM/°C Typical

DRIVE CAPABILITIES

10 TTL Loads maximum
—Compatible with TTL and DTL circuits
—Other delays and tolerances upon request



Part Number	* Min. Delay 1, 2	** Max. Delay (NOM) 1, 2	Δ Delay / Step 1, 2
0449-0030-04	15 ± 1 NS	30NS	$1 \pm .7$ NS
0449-0045-04	15 ± 1 NS	45NS	$2 \pm .7$ NS
0449-0060-04	15 ± 1 NS	60NS	$3 \pm .7$ NS
0449-0075-04	15 ± 1 NS	75NS	$4 \pm .8$ NS
0449-0090-04	15 ± 1 NS	90NS	5 ± 1.0 NS
0449-0105-04	15 ± 1 NS	105NS	6 ± 1.2 NS
0449-0120-04	15 ± 1 NS	120NS	7 ± 1.4 NS
0449-0135-04	15 ± 1 NS	135NS	8 ± 1.6 NS
0449-0150-04	15 ± 1 NS	150NS	9 ± 1.8 NS
0449-0165-04	15 ± 1 NS	165NS	10 ± 2.0 NS

1 Delays measured at 1.5 Volt level on Leading Edge only.
2 Measured with no loads on output.

CONTROL SIGNAL TABLE

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

* Minimum Delay Code
** Maximum Delay Code

Specifications Subject To Change Without Notice