

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 x Maximum Delay
Pulse Period	5 x Pulse Width
Supply Current	100.0 Milliamps max.
Supply Voltage, Vcc	5.0 Volts
Ambient Temperature	25°C

PERFORMANCE CHARACTERISTICS

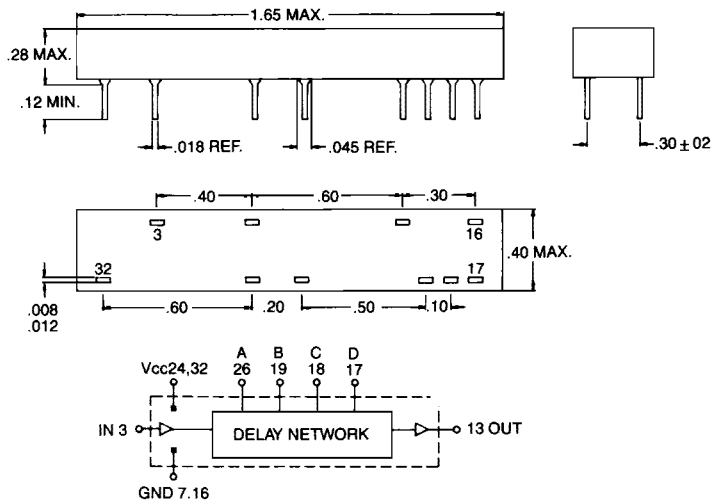
Programmable Delay Tolerance
± 2 Nsec or 5% whichever is greater
Performance Characteristics apply at above listed Test conditions.

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 ± 1NS	30NS	1 ± .7NS
0449-0045-04	15 ± 1NS	45NS	2 ± .7NS
0449-0060-04	15 ± 1NS	60NS	3 ± .7NS
0449-0075-04	15 ± 1NS	75NS	4 ± .8NS
0449-0090-04	15 ± 1NS	90NS	5 ± 1.0NS
0449-0105-04	15 ± 1NS	105NS	6 ± 1.2NS
0449-0120-04	15 ± 1NS	120NS	7 ± 1.4NS
0449-0135-04	15 ± 1NS	135NS	8 ± 1.6NS
0449-0150-04	15 ± 1NS	150NS	9 ± 1.8NS
0449-0165-04	15 ± 1NS	165NS	10 ± 2.0NS

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