

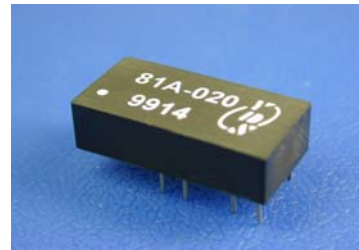


### FEATURES

- 16-PIN PACKAGE.
- ECL INPUT AND OUTPUT LEVEL.
- INHERENT DELAY( $T_o$ ):3ns TYP.
- FAN-OUT 70 ECL CAPACITY.

### ELECTRICAL CHARACTERISTICS

I <sub>IH</sub> Logic"1" Input Current	:265uA max
I <sub>IL</sub> Logic"0" Input Current	:5uA max
V <sub>OH</sub> Logic"1" Output Voltage	:-0.96V min
V <sub>OL</sub> Logic"0" Output Voltage	:-1.65V max
V <sub>IH</sub> Logic"1" Input Voltage	:-0.98V min
V <sub>IL</sub> Logic"0" Input Voltage	:-1.63V max
TA Operating Temperature	:0°C to 70°C
Supply Current	:55mA Typ.



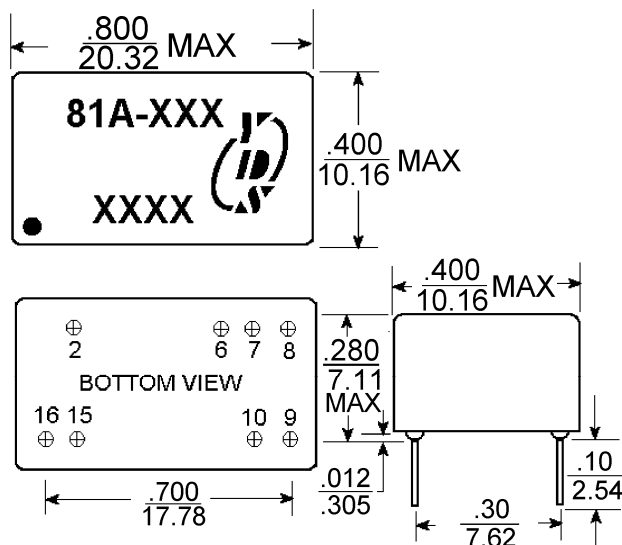
### INPUT PULSE TEST CONDITION

Pulse Voltage	:-1V(-0.75V TO -1.75V)
Pulse Width	:3T <sub>d</sub>
Pulse Spacing	:10T <sub>d</sub>
Pulse Rise Time	:2nS(0.75 to 2.4V)
Time Delay Measured	:@-1.3V level
Supply Voltage V <sub>cc</sub>	:-0V
Supply Voltage V <sub>ee</sub>	:-5.2±5%V <sub>dc</sub>

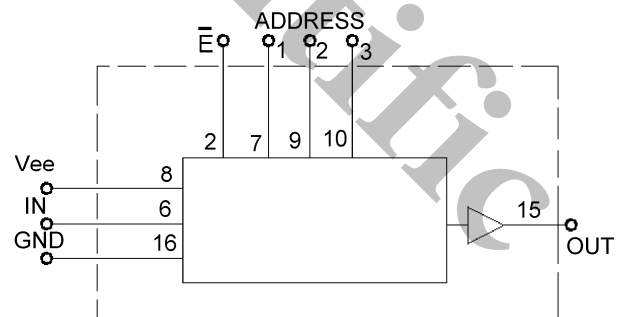
### DELAY SPECIFICATIONS IN (ns)NANOSECONDS

Program Pins	0	1	2	3	4	5	6	7	Tol. Of Prog. Delay	Delay Time Per. Step	Delay Time Step Tol.	Maximum Delay Nominal Ref.IN
Part numbers	0	0	0	0	0	0	0	0				
	1	0	1	0	1	0	1	0				
81A-010	3±1ns	1	2	3	4	5	6	7	±1ns	1ns	±0.1ns	10ns
81A-017	3±1ns	2	4	6	8	10	12	14	±1ns	2ns	±0.2ns	17ns
81A-024	3±1ns	3	6	9	12	15	18	21	±1ns	3ns	±0.3ns	24ns
81A-031	3±1ns	4	8	12	16	20	24	28	±1.5ns	4ns	±0.4ns	31ns
81A-038	3±1ns	5	10	15	20	25	30	35	±1.7ns	5ns	±0.5ns	38ns
81A-045	3±1ns	6	12	18	24	30	36	42	±2ns	6ns	±0.6ns	45ns
81A-052	3±1ns	7	14	21	28	35	42	49	±2.4 n s	7ns	±0.7ns	52ns
81A-059	3±1ns	8	16	24	32	40	48	56	±2.6 ns	8ns	±0.8ns	59ns
81A-066	3±1ns	9	18	27	36	45	54	63	±3.1 ns	9ns	±0.9ns	66ns
81A-073	3±1ns	10	20	30	40	50	60	70	±3.5 ns	10ns	±1ns	73ns
81A-087	3±1ns	12	24	36	48	60	72	84	±4.2 ns	12ns	±1.2ns	87ns

### MARKINGS AND DIMENSIONS



### PIN CONNECTIONS



Dimensions:inches/mm

Unless otherwise specified, all tolerances are ±.010/±0.25