

100K ECL Logic 4-Bit Programmable Delay Modules

ELECTRICAL SPECIFICATIONS @ 25°C

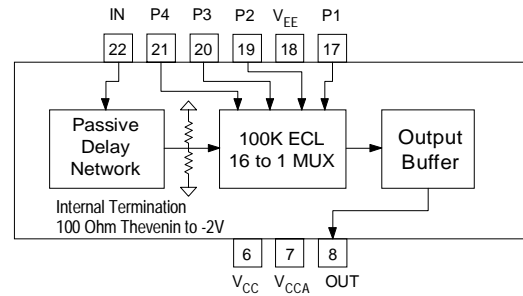
Inherent Delay Time (Step 0) 2.00 ns ± 0.50 ns
 Delay Per Programming Step See Table
 Maximum Programming Delay 2 ns + (15 x Step)
 Output Rise Time (20% to 80%) 2.00 ns Max.

OPERATING SPECIFICATIONS

V_{EE} , Supply Voltage -4.2 to -5.7VDC
 I_{EE} , Supply Current 95 mA typ.
 Logic "1" Input: V_{IH} -1.165V min.
 I_{IH} 300 μ A max.
 Logic "0" Input: V_{IL} -1.475V max.
 I_{IL} 0.5 μ A min.
 V_{OH} Logic "1" Voltage Out -1.025 V min.
 V_{OL} Logic "0" Voltage Out -1.620V max.
 Storage Temperature Range -55° to +125°C
 Operating Temperature Range 0° to +85°C

** Pin 22, Input is internally connected to 16 standard 100K inputs and is internally terminated by Thevenin equivalent of 100 Ohms to -2V.

Schematic Diagram

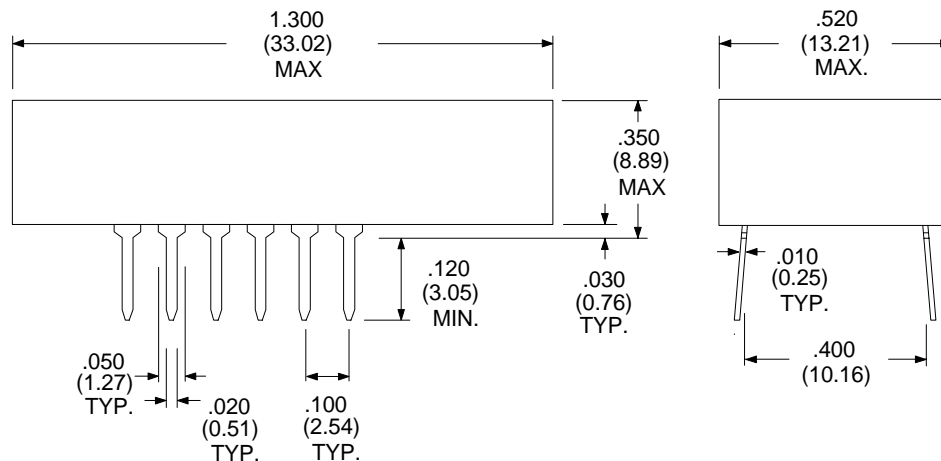


TEST CONDITIONS

V_{EE} Supply Voltage -4.50 VDC
 Input Pulse Rise Time 2.0ns max.
 Input Pulse Frequency 10 MHz
 Input Pulse Duty Cycle 50%
 1. Measurements made at 25 °C
 2. Output Terminated through 50 ohms to -2.00 VDC.
 3. Delays measured at 50% level of leading edge.

4-Bit Prog. 100K ECL Part Number	Delay per Step (ns)	Error ref. to 0000 (ns)	Initial Delay (ns)	Output Delay (ns) Referenced to "0000" per Program Setting (P4*P3*P2*P1)															
				0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110	1111
PPECL2P25	0.25 ± .12	± 0.50	2.0 ± 0.5	0.00	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75
PPECL2P50	0.50 ± .25	± 0.50	2.0 ± 0.5	0.00	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
PPECL2P75	0.75 ± .35	± 1.0	2.0 ± 0.5	0.00	0.75	1.50	2.25	3.00	3.75	4.50	5.25	6.00	6.75	7.50	8.25	9.00	9.75	10.50	11.25
PPECL2-1	1.00 ± .50	± 1.0	2.0 ± 0.5	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00	15.00
PPECL2-1.25	1.25 ± .60	± 1.0	2.0 ± 0.5	0.00	1.25	2.50	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50	13.75	15.00	16.25	17.50	18.75
PPECL2-1.5	1.50 ± .60	± 1.0	2.0 ± 0.5	0.00	1.50	3.00	4.50	6.00	7.50	9.00	10.50	12.00	13.50	15.00	16.50	18.00	19.50	21.00	22.50
PPECL2-2	2.00 ± .70	± 1.5	2.0 ± 0.5	0.00	2.00	4.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	22.00	24.00	26.00	28.00	30.00
PPECL2-2.5	2.50 ± .70	± 1.5	2.0 ± 0.5	0.00	2.50	5.00	7.50	10.00	12.50	15.00	17.50	20.00	22.50	25.00	27.50	30.00	32.50	35.00	37.50
PPECL2-3	3.00 ± .70	± 1.5	2.0 ± 0.5	0.00	3.00	6.00	9.00	12.00	15.00	18.00	21.00	24.00	27.00	30.00	33.00	36.00	39.00	42.00	45.00
PPECL2-4	4.00 ± .80	± 3.0	2.0 ± 0.5	0.00	4.00	8.00	12.00	16.00	20.00	24.00	28.00	32.00	36.00	40.00	44.00	48.00	52.00	56.00	60.00
PPECL2-5	5.00 ± 1.0	± 3.0	2.0 ± 0.5	0.00	5.00	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00

24-Pin Package with Unused Pins Removed per Schematic. Dimensions inches (mm)



Specifications subject to change without notice.

For other values & Custom Designs, contact factory.

PPECL2 9901



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