

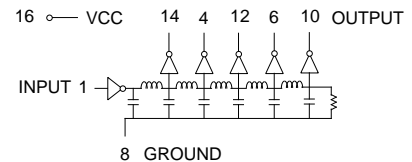
# 16 Pin DIP 5 Tap TTL Compatible Active Delay Lines

TAP DELAYS ±5% or ±2 nS†	TOTAL DELAYS ±5% or ±2 nS†	PART NUMBER	TAP DELAYS ±5% or ±2 nS†	TOTAL DELAYS ±5% or ±2 nS†	PART NUMBER
5, 10, 15, 20	25	EPA054-25	80, 160, 240, 320	400	EPA054-400
6, 12, 18, 24	30	EPA054-30	84, 168, 252, 336	420	EPA054-420
7, 14, 21, 28	35	EPA054-35	88, 176, 264, 352	440	EPA054-440
8, 16, 24, 32	40	EPA054-40	90, 180, 270, 360	450	EPA054-450
9, 18, 27, 36	45	EPA054-45	94, 188, 282, 376	470	EPA054-470
10, 20, 30, 40	50	EPA054-50	100, 200, 300, 400	500	EPA054-500
12, 24, 36, 48	60	EPA054-60	110, 220, 330, 440	550	EPA054-550
15, 30, 45, 60	75	EPA054-75	120, 240, 360, 480	600	EPA054-600
20, 40, 60, 80	100	EPA054-100	130, 260, 390, 520	650	EPA054-650
25, 50, 75, 100	125	EPA054-125	140, 280, 420, 560	700	EPA054-700
30, 60, 90, 120	150	EPA054-150	150, 300, 450, 600	750	EPA054-750
35, 70, 105, 140	175	EPA054-175	160, 320, 480, 640	800	EPA054-800
40, 80, 120, 160	200	EPA054-200	170, 340, 510, 680	850	EPA054-850
45, 90, 135, 180	225	EPA054-225	180, 360, 540, 720	900	EPA054-900
50, 100, 150, 200	250	EPA054-250	190, 380, 570, 760	950	EPA054-950
60, 120, 180, 240	300	EPA054-300	200, 400, 600, 800	1000	EPA054-1000
70, 140, 210, 280	350	EPA054-350			

† Whichever is greater. Delay times referenced from input to leading edges at 25°C, 5.0V, with no load.

DC Electrical Characteristics			Min	Max	Unit
Parameter	Test Conditions				
V <sub>OH</sub>	High-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IL</sub> = max. I <sub>OH</sub> = max	2.7		V
V <sub>OL</sub>	Low-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IH</sub> = min. I <sub>OL</sub> = max		0.5	V
V <sub>IK</sub>	Input Clamp Voltage	V <sub>CC</sub> = min. I <sub>I</sub> = I <sub>IK</sub>		-1.2	V
I <sub>IH</sub>	High-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 2.7V		50	µA
		V <sub>CC</sub> = max. V <sub>IN</sub> = 5.25V		1.0	mA
I <sub>IL</sub>	Low-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0.5V		-2	mA
I <sub>OS</sub>	Short Circuit Output Current	V <sub>CC</sub> = max. V <sub>OUT</sub> = 0. (One output at a time)	-40	-100	mA
I <sub>CCH</sub>	High-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN		75	mA
I <sub>CCL</sub>	Low-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0		75	mA
T <sub>RO</sub>	Output Rise Time	T <sub>d</sub> ≤ 500 nS (0.75 to 2.4 Volts) T <sub>d</sub> > 500 nS		4 5	nS
N <sub>H</sub>	Fanout High-Level Output	V <sub>CC</sub> = max. V <sub>OH</sub> = 2.7V		20 TTL LOAD	
N <sub>L</sub>	Fanout Low-Level Output	V <sub>CC</sub> = max. V <sub>OL</sub> = 0.5V		10 TTL LOAD	

## Schematic



Recommended Operating Conditions		Min	Max	Unit
V <sub>CC</sub>	Supply Voltage	4.75	5.25	V
V <sub>IH</sub>	High-Level Input Voltage	2.0		V
V <sub>IL</sub>	Low-Level Input Voltage		0.8	V
I <sub>IK</sub>	Input Clamp Current		-18	mA
I <sub>OH</sub>	High-Level Output Current		-1.0	mA
I <sub>OL</sub>	Low-Level Output Current		20	mA
PW*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	-55	+125	°C

\*These two values are inter-dependent.

Input Pulse Test Conditions @ 25° C			Unit
E <sub>IN</sub>	Pulse Input Voltage	3.2	Volts
PW	Pulse Width % of Total Delay	110	%
T <sub>RI</sub>	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
PRR	Pulse Repetition Rate @ T <sub>d</sub> ≤ 200 nS	1.0	MHz
	Pulse Repetition Rate @ T <sub>d</sub> > 200 nS	100	KHz
V <sub>CC</sub>	Supply Voltage	5.0	Volts

## Package Dimensions

