

8 Pin DIP Dual Fast Logic TTL Compatible Active Delay Lines

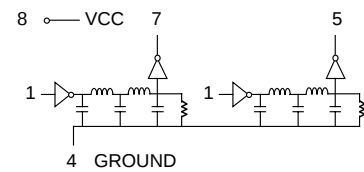
DELAY TIME*	PART NUMBER	DELAY TIME*	PART NUMBER	DELAY TIME*	PART NUMBER
5 ± 1	EPA509-5	18	EPA509-18	55	EPA509-55
6 ± 1	EPA509-6	19	EPA509-19	60	EPA509-60
7 ± 1	EPA509-7	20	EPA509-20	65	EPA509-65
8 ± 1	EPA509-8	21	EPA509-21	70	EPA509-70
9 ± 1	EPA509-9	22	EPA509-22	75	EPA509-75
10 ± 1.5	EPA509-10	23	EPA509-23	80	EPA509-80
11 ± 1.5	EPA509-11	24	EPA509-24	85	EPA509-85
12 ± 1.5	EPA509-12	25	EPA509-25	90	EPA509-90
13 ± 1.5	EPA509-13	30	EPA509-30	95	EPA509-95
14 ± 1.5	EPA509-14	35	EPA509-35	100	EPA509-100
15	EPA509-15	40	EPA509-40	150	EPA509-150
16	EPA509-16	45	EPA509-45	200	EPA509-200
17	EPA509-17	50	EPA509-50	250	EPA509-250

Delay Times referenced from input to leading edges at 25°C, 5.0V, with no load.

* Unless otherwise specified, delay tolerance is ± 2 nS or ± 5%, whichever is greater.

DC Electrical Characteristics					
Parameter	Test Conditions	Min	Max	Unit	
V _{OH}	High-Level Output Voltage	V _{CC} = min. V _{IL} = max. I _{OH} = max	2.7	V	
V _{OL}	Low-Level Output Voltage	V _{CC} = min. V _{IH} = min. I _{OL} = max	0.5	V	
V _{IK}	Input Clamp Voltage	V _{CC} = min. I _I = I _{IK}	-1.2V	V	
I _{IH}	High-Level Input Current	V _{CC} = max. V _{IN} = 2.7V	50	µA	
		V _{CC} = max. V _{IN} = 5.25V	1.0	mA	
I _{IL}	Low-Level Input Current	V _{CC} = max. V _{IN} = 0.5V	-2	mA	
I _{OS}	Short Circuit Output Current	V _{CC} = max. V _{OUT} = 0. (One output at a time)	-100	mA	
I _{CC}	High-Level Supply Current	V _{CC} = max. V _{IN} = OPEN	90	mA	
I _{CCL}	Low-Level Supply Current	V _{CC} = max. V _{IN} = 0	90	mA	
T _{RO}	Output Rise Time		4	nS	
N _H	Fanout High-Level Output	V _{CC} = max. V _{OH} = 2.7V	20	TTL LOAD	
N _L	Fanout Low-Level Output	V _{CC} = max. V _{OL} = 0.5V	10	TTL LOAD	

Schematic



Recommended Operating Conditions		Min	Max	Unit
V _{CC}	Supply Voltage	4.75	5.25	V
V _{IH}	High-Level Input Voltage	2.0		V
V _{IL}	Low-Level Input Voltage		0.8	V
I _{IK}	Input Clamp Current		-18	mA
I _{OH}	High-Level Output Current		-1.0	mA
I _{OL}	Low-Level Output Current		20	mA
P _W *	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T _A	Operating Free-Air Temperature	0	+70	°C

*These two values are inter-dependent.

Input Pulse Test Conditions @ 25° C			Unit
E _{IN}	Pulse Input Voltage	3.2	Volts
P _W	Pulse Width % of Total Delay	110	%
T _{RI}	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
P _{RR}	Pulse Repetition Rate	1.0	MHz
V _{CC}	Supply Voltage	5.0	Volts

Package Dimensions

