

8 Pin SIL 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
1.0 ± 0.5	*4 ± 0.5	EPA600-4	15	75	EPA600-75
1.5 ± 0.5	*6 ± 0.5	EPA600-6	20	100	EPA600-100
2.0 ± 1	*8 ± 1.0	EPA600-8	25	125	EPA600-125
2.5 ± 1	*10	EPA600-10	30	150	EPA600-150
3.0 ± 1	*12	EPA600-12	35	175	EPA600-175
4.0 ± 1.5	*16	EPA600-16	40	200	EPA600-200
5.0	*20	EPA600-20	50	250	EPA600-250
6.0	30	EPA600-30	60	300	EPA600-300
7.0	35	EPA600-35	70	350	EPA600-350
8.0	40	EPA600-40	80	400	EPA600-400
9.0	45	EPA600-45	90	450	EPA600-450
10.0	50	EPA600-50	100	500	EPA600-500
12.0	60	EPA600-60			

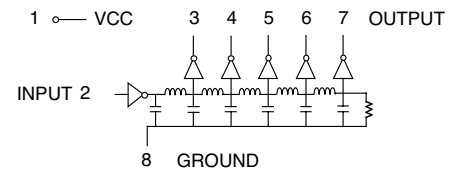
†Whichever is greater. Delay times referenced from input to leading edges at 25°C, 5.0V, with no load.

*Delay times referenced from 1st tap

1st tap is the inherent delay: approx. 7 nS

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.	-40		mA
		(One output at a time)			
I _{CC}	High-Level Supply Current	V _{CC} = max. V _{IN} = OPEN	115		mA
I _{CL}	Low-Level Supply Current	V _{CC} = max. V _{IN} = 0	115		mA
T _{RO}	Output Rise Time	T _d ≤ 500 nS (0.75 to 2.4 Volts)	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
PW*	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
PW	Pulse Width % of Total Delay	110	%
T _{RI}	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
P _{RR}	Pulse Repetition Rate @ T _d ≤ 200 nS	1.0	MHz
	Pulse Repetition Rate @ T _d > 200 nS	100	KHz
V _{CC}	Supply Voltage	5.0	Volts

Package Dimensions

