

# 24 Pin DIL 8 Tap 100K ECL Compatible Active Delay Lines

PCA P/N	TAP 1	TAP 2	TAP 3	TAP 4	TAP 5	TAP 6	TAP 7	OUTPUT
EPA199-10	3.0†	4.0±.5	5.0±.5	6.0±1	7.0±1	8.0±1	9.0±1	10.0±1
EPA199-13.5	3.0†	4.5±.5	6.0±1	7.5±1	9.0±1	10.5	12.0	13.5
EPA199-17	3.0†	5.0±.5	7.0±1	9.0±1	11.0	13.0	15.0	17.0
EPA199-20.5	3.0†	5.5±1	8.0±1	10.5	13.5	15.5	18.0	20.5
EPA199-24	3.0†	6.0±1	9.0±1	12.0	15.0	18.0	21.0	24.0
EPA199-32	4.0±.5	8.0±1	12.0	16.0	20.0	24.0	28.0	32.0
EPA199-40	5.0±.5	10.0±1	15.0	20.0	25.0	30.0	35.0	40.0
EPA199-48	6.0±1	12.0	18.0	24.0	30.0	36.0	42.0	48.0
EPA199-56	7.0±1	14.0	21.0	28.0	35.0	42.0	49.0	56.0
EPA199-64	8.0±1	16.0	24.0	32.0	40.0	48.0	56.0	64.0
EPA199-72	9.0±1	18.0	27.0	36.0	45.0	54.0	63.0	72.0
EPA199-80	10.0±1	20.0	30.0	40.0	50.0	60.0	70.0	80
EPA199-120	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120
EPA199-160	20.0	40.0	60.0	80.0	100.0	120.0	140.0	160

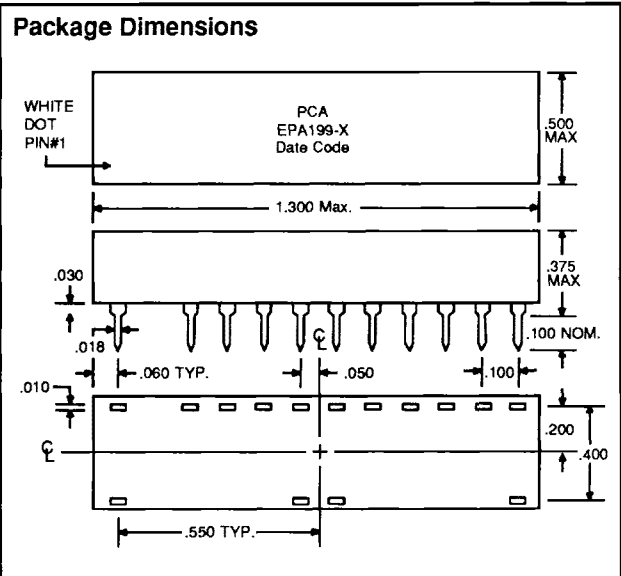
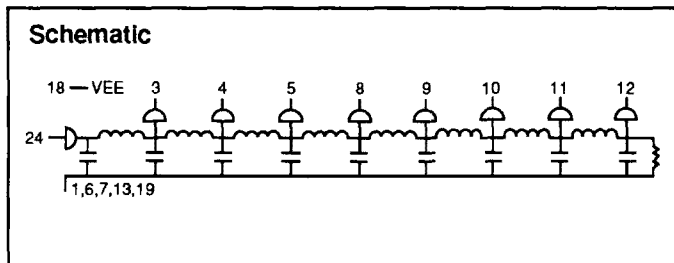
Delay time measured at -1.3V, no load, tolerance is ±5% or ±2nS whichever is greater, unless otherwise specified.  
 Delay times referenced from input to leading edges  
 †Inherent delay (3nS ± 1nS)

Rise time output (2nS max. Td < 50nS, 3nS max. Td ≥ 50nS)  
 measured from 20% to 80%  
 Output terminated (externally) with 50Ω to -2.0Vdc

DC Electrical Characteristics	Test Conditions V <sub>EE</sub> = -4.2V ± 0.01V to -4.8V ± 0.010V	Min	Max	Unit	Input Pulse Test Conditions @ 25° C		
					V <sub>IN</sub>	PW	TR
High-Level Output Voltage	V <sub>IN</sub> = V <sub>IH</sub> Max or V <sub>IL</sub> Min	-1025	-880	mV	V <sub>IN</sub>	Pulse Input Voltage	1.165 V
High-Level Output Threshold Voltage	V <sub>IN</sub> = V <sub>IH</sub> Min or V <sub>IL</sub> Max	-1035		mV	PW	Pulse Width of Total Delay	2x Total Delay
Low-Level Output Threshold Voltage	V <sub>IN</sub> = V <sub>IH</sub> Min or V <sub>IL</sub> Max		-1610	mV	TR	Pulse Rise Time (20% to 80%)	2 nS
Low-Level Output Voltage	V <sub>IN</sub> = V <sub>IH</sub> Max or V <sub>IL</sub> Min	-1810	-1620	mV	PS	Pulse Spacing	5x Total Td
High-Level Input Current	V <sub>IN</sub> = V <sub>IH</sub> Max		350	μA	V <sub>EE</sub>	Supply Voltage	-4.5 V
Low-Level Input Current	V <sub>IN</sub> = V <sub>IL</sub> Min	0.5		μA			
V <sub>EE</sub> Supply Current			100	mA			

Recommended Operating Conditions		Min	Max	Unit
V <sub>EE</sub>	Supply Voltage (Negative)	-4.2	-4.8	V
V <sub>IH</sub>	High-Level Input Voltage	-1165	-880	mV
V <sub>IHT</sub>	High-Level Input Threshold Voltage	-1165		mV
V <sub>ILT</sub>	Low-Level Input Threshold Voltage		-1475	mV
V <sub>IL</sub>	Low-Level Input Voltage	-1810	-1475	mV
P <sub>W</sub> *	Pulse Width of Total Delay	200		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	0	+85	°C

\*These two values are inter-dependent.



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