

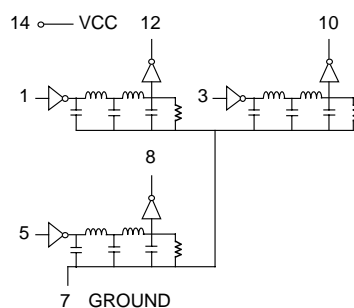
# SMD 14-Pin Triple TTL Compatible Active Delay Lines

DELAY TIME ±5% or ±2 nS†	PART NUMBER	DELAY TIME ±5% or ±2 nS†	PART NUMBER	DELAY TIME ±5% or ±2 nS†	PART NUMBER
5	EPA280-5	19	EPA280-19	65	EPA280-65
6	EPA280-6	20	EPA280-20	70	EPA280-70
7	EPA280-7	21	EPA280-21	75	EPA280-75
8	EPA280-8	22	EPA280-22	80	EPA280-80
9	EPA280-9	23	EPA280-23	85	EPA280-85
10	EPA280-10	24	EPA280-24	90	EPA280-90
11	EPA280-11	25	EPA280-25	95	EPA280-95
12	EPA280-12	30	EPA280-30	100	EPA280-100
13	EPA280-13	35	EPA280-35	125	EPA280-125
14	EPA280-14	40	EPA280-40	150	EPA280-150
15	EPA280-15	45	EPA280-45	175	EPA280-175
16	EPA280-16	50	EPA280-50	200	EPA280-200
17	EPA280-17	55	EPA280-55	225	EPA280-225
18	EPA280-18	60	EPA280-60	250	EPA280-250

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

DC Electrical Characteristics		Test Conditions	Min	Max	Unit
Parameter					
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>		-1.2V	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		115	mA
I <sub>CCL</sub>	Low-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0		115	mA
T <sub>RO</sub>	Output Rise Time	T <sub>d</sub> ≤ 500 nS (0.75 to 2.4 Volts)		4	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	

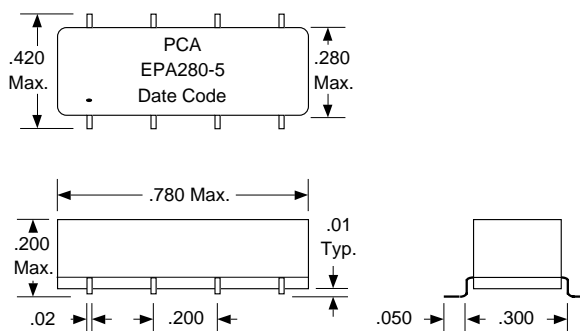
## Schematic



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
P <sub>W</sub> *	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	0	+70	°C

\*These two values are inter-dependent.

## Package Dimensions



Input Pulse Test Conditions @ 25° C		Unit
E <sub>IN</sub>	Pulse Input Voltage	3.2 Volts
P <sub>W</sub>	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