14 Pin DIL 5 Tap TTL Compatible Active Delay Lines

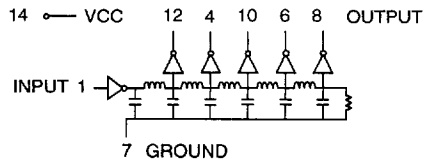
TAP DELAYS ±5% or 2 nS†	TOTAL DELAYS ±5% or 2 nS†	PART NUMBER	TAP DELAYS ±5% or ±2 nS†	TOTAL DELAYS ±5% or ±2 nS†	PART NUMBER
5, 10, 15, 20	25	EP9810-25	80, 160, 240, 320	400	EP9810-400
6, 12, 18, 24	30	EP9810-30	84, 168, 252, 336	420	EP9810-420
7, 14, 21, 28	35	EP9810-35	88, 176, 264, 352	440	EP9810-440
8, 16, 24, 32	40	EP9810-40	90, 180, 270, 360	450	EP9810-450
9, 18, 27, 36	45	EP9810-45	94, 188, 282, 376	470	EP9810-470
10, 20, 30, 40	50	EP9810-50	100, 200, 300, 400	500	EP9810-500
12, 24, 36, 48	60	EP9810-60	110, 220, 330, 440	550	EP9810-550
15, 30, 45, 60	75	EP9810-75	120, 240, 360, 480	600	EP9810-600
20, 40, 60, 80	100	EP9810-100	130, 260, 390, 520	650	EP9810-650
25, 50, 75, 100	125	EP9810-125	140, 280, 420, 560	700	EP9810-700
30, 60, 90, 120	150	EP9810-150	150, 300, 450, 600	750	EP9810-750
35, 70, 105, 140	175	EP9810-175	160, 320, 480, 640	800	EP9810-800
40, 80, 120, 160	200	EP9810-200	170, 340, 510, 680	850	EP9810-850
45, 90, 135, 180	225	EP9810-225	180, 360, 540, 720	900	EP9810-900
50, 100, 150, 200	250	EP9810-250	190, 380, 570, 760	950	EP9810-950
60, 120, 180, 240	300	EP9810-300	200, 400, 600, 800	1000	EP9810-1000
70, 140, 210, 280	350	EP9810-350			

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

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}		-1.2	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)	-40	-100	mA
I_{CCH}	High-Level Supply Current	V_{CC}= max. V_{IN} = OPEN		75	mA
I_{CCL}	Low-Level Supply Current	V_{CC}= max. V_{IN}= 0		75	mA
T_{RO}	Output Rise Time	Td ≤ 500 nS (0.75 to 2.4 Volts)		4	nS
		Td > 500 nS		5	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

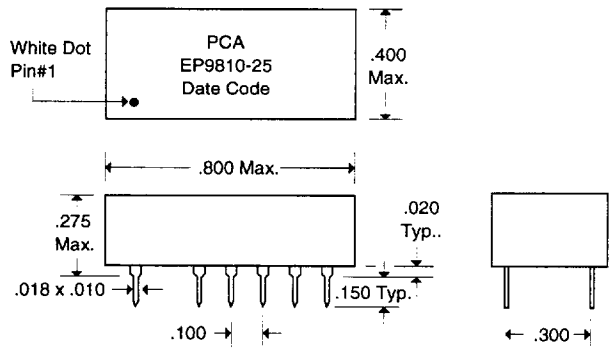
		Min	Max	Unit
V_{CC}	Supply Voltage	4.75	5.25	V
V_{IH}	High-Level Input Voltage	2.0		V
V_{IL}	Low-Level Input Voltage		0.8	V
I_{IK}	Input Clamp Current		-18	mA
I_{OH}	High-Level Output Current		-1.0	mA
I_{OL}	Low-Level Output Current		20	mA
P_W*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T_A	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 @ Td ≤ 200 nS	1.0	MHz
	Pulse Repetition Rate @ Td > 200 nS	100	KHz
V_{CC}	Supply Voltage	5.0	Volts

Package Dimensions



Unless Otherwise Noted Dimensions in Inches
Tolerances:
Fractional = ± 1/32
.XX = ± .030 .XXX = ± .010

PCA ELECTRONICS INC.
16799 SCHOENBORN ST.
NORTH HILLS, CA 91343
TEL: (818) 892-0761
FAX: (818) 894-5791