SMD 14 Pin Single Output TTL Compatible Active Delay Lines

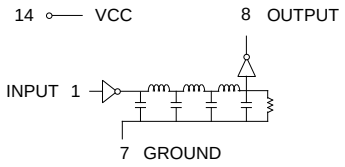
TIME DELAYS (nS) ±5% or ±2 nS†	PART NUMBER	TIME DELAYS (nS) ±5% or ±2 nS†	PART NUMBER	TIME DELAYS (nS) ±5% or ±2 nS†	PART NUMBER
5	EPA810-5	23	EPA810-23	125	EPA810-125
6	EPA810-6	24	EPA810-24	150	EPA810-150
7	EPA810-7	25	EPA810-25	175	EPA810-175
8	EPA810-8	30	EPA810-30	200	EPA810-200
9	EPA810-9	35	EPA810-35	225	EPA810-225
10	EPA810-10	40	EPA810-40	250	EPA810-250
11	EPA810-11	45	EPA810-45	275	EPA810-275
12	EPA810-12	50	EPA810-50	300	EPA810-300
13	EPA810-13	55	EPA810-55	350	EPA810-350
14	EPA810-14	60	EPA810-60	400	EPA810-400
15	EPA810-15	65	EPA810-65	500	EPA810-500
16	EPA810-16	70	EPA810-70	600	EPA810-600
17	EPA810-17	75	EPA810-75	700	EPA810-700
18	EPA810-18	80	EPA810-80	800	EPA810-800
19	EPA810-19	85	EPA810-85	900	EPA810-900
20	EPA810-20	90	EPA810-90	1000	EPA810-1000
21	EPA810-21	95	EPA810-95		
22	EPA810-22	100	EPA810-100		

†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.	-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
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

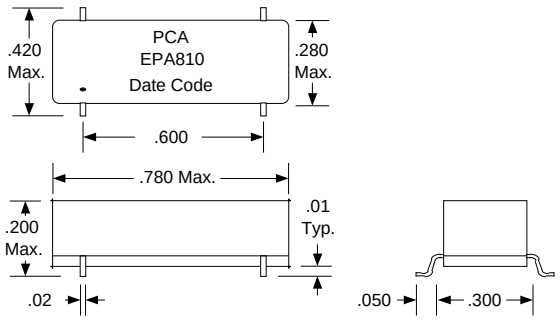
		Min	Max	Unit
V_{CC}	Supply Voltage	4.75	5.25	V
V_{IH}	High-Level Input Voltage	2.0		V
V_{IL}	Low-Level Input Voltage		0.8	V
I_{IK}	Input Clamp Current		-18	mA
I_{OH}	High-Level Output Current		-1.0	mA
I_{OL}	Low-Level Output Current		20	mA
P_W*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T_A	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



DSA810 Rev. A 2/5/96

QAF-CSO1 Rev. B 8/25/94

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

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