

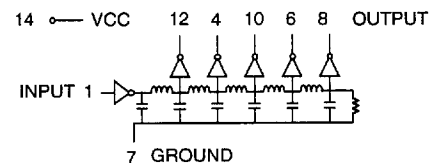
14 Pin DIP 5 Tap TTL Compatible High Speed Active Delay Lines

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	EP8700	80, 160, 240, 320	400	EP8708
6, 12, 18, 24	30	EP8713	84, 168, 252, 336	420	EP8718
7, 14, 21, 28	35	EP8714	88, 176, 264, 352	440	EP8722
8, 16, 24, 32	40	EP8715	90, 180, 270, 360	450	EP8709
9, 18, 27, 36	45	EP8716	94, 188, 282, 376	470	EP8723
10, 20, 30, 40	50	EP8701	100, 200, 300, 400	500	EP8710
12, 24, 36, 48	60	EP8711	110, 220, 330, 440	550	EP8730
15, 30, 45, 60	75	EP8717	120, 240, 360, 480	600	EP8724
20, 40, 60, 80	100	EP8702	130, 260, 390, 520	650	EP8731
25, 50, 75, 100	125	EP8719	140, 280, 420, 560	700	EP8725
30, 60, 90, 120	150	EP8703	150, 300, 450, 600	750	EP8729
35, 70, 105, 140	175	EP8720	160, 320, 480, 640	800	EP8726
40, 80, 120, 160	200	EP8704	170, 340, 510, 680	850	EP8732
45, 90, 135, 180	225	EP8721	180, 360, 540, 720	900	EP8727
50, 100, 150, 200	250	EP8705	190, 380, 570, 760	950	EP8733
60, 120, 180, 240	300	EP8706	200, 400, 600, 800	1000	EP8728
70, 140, 210, 280	350	EP8707			

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

DC Electrical Characteristics			Min	Max	Unit
Parameter	Test Conditions				
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
		(One output at a time)			
I _{CC}	High-Level Supply Current	V _{CC} = max. V _{IN} = OPEN		75	mA
I _{CL}	Low-Level Supply Current	V _{CC} = max. V _{IN} = 0		75	mA
T _{RO}	Output Rise Time	T _d ≤ 500 nS (0.75 to 2.4 Volts)		4	nS
		T _d > 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

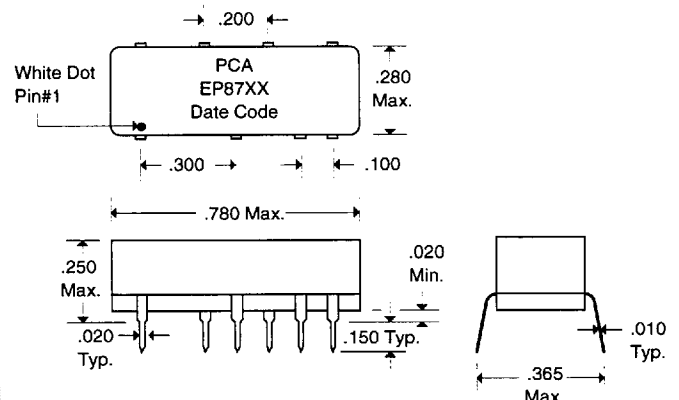


Recommended Operating Conditions		Min	Max	Unit
V _{CC}	Supply Voltage	4.75	5.25	V
V _{IH}	High-Level Input Voltage	2.0		V
V _{IL}	Low-Level Input Voltage		0.8	V
I _{IK}	Input Clamp Current		-18	mA
I _{OH}	High-Level Output Current		-1.0	mA
I _{OL}	Low-Level Output Current		20	mA
PW*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T _A	Operating Free-Air Temperature	-55	+125	°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	%
TRI	Pulse Rise Time (0.75 - 2.4 Volts)	2.0	nS
PRR	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



DSD87XX Rev. A 2/5/96

6852109 0000579 307

QAF-CS01 Rev. B 8/25/94

Unless Otherwise Noted Dimensions in Inches

Tolerances:

Fractional = ± 1/32

20 .XX = ± .030 .XXX = ± .010



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