14 Pin DIP 5 Tap Low Power TTL Compatible Active Delay Lines

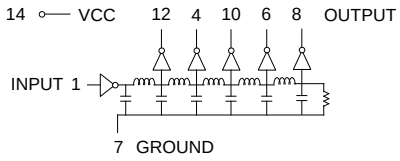
TAP DELAYS ±5% or 2 nS†	TOTAL DELAYS ±5% or 2 nS†	PART NUMBER	TAP DELAYS ±5% or 2 nS†	TOTAL DELAYS ±5% or 2 nS†	PART NUMBER
10, 20, 30, 40	50	EP8270	30, 60, 90, 120	150	EP8282
11, 22, 33, 44	55	EP8271	35, 70, 105, 140	175	EP8283
12, 24, 36, 48	60	EP8272	40, 80, 120, 160	200	EP8284
13, 26, 39, 52	65	EP8273	45, 90, 135, 180	225	EP8285
14, 28, 42, 56	70	EP8274	50, 100, 150, 200	250	EP8286
15, 30, 45, 60	75	EP8275	55, 110, 165, 220	275	EP8287
16, 32, 48, 64	80	EP8276	60, 120, 180, 240	300	EP8288
17, 34, 51, 68	85	EP8277	70, 140, 210, 280	350	EP8289
18, 36, 54, 72	90	EP8278	80, 160, 240, 320	400	EP8290
19, 38, 57, 76	95	EP8279	90, 180, 270, 360	450	EP8291
20, 40, 60, 80	100	EP8280	100, 200, 300, 400	500	EP8292
25, 50, 75, 100	125	EP8281			

†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 = II_K		-1.5	V
I_{IH}	High-Level Input Current	V_{CC} = max. V_{IN} = 2.7V		20	µA
		V_{CC} = max. V_{IN} = 5.25V		0.1	mA
I_{IL}	Low-Level Input Current	V_{CC} = max. V_{IN} = 0.5V		-0.36	mA
I_{OS}	Short Circuit Output Current	V_{CC} = max. V_{OUT} = 0. (One output at a time)	-5	-42	mA
I_{CCH}	High-Level Supply Current	V_{CC} = max. V_{IN} = OPEN		30	mA
I_{CCL}	Low-Level Supply Current	V_{CC} = max. V_{IN} = 0		30	mA
T_{RO}	Output Rise Time	Td ≤ 500 nS (0.75 to 2.4 Volts)		8	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	20LS TTL LOAD		

Schematic



Recommended Operating Conditions

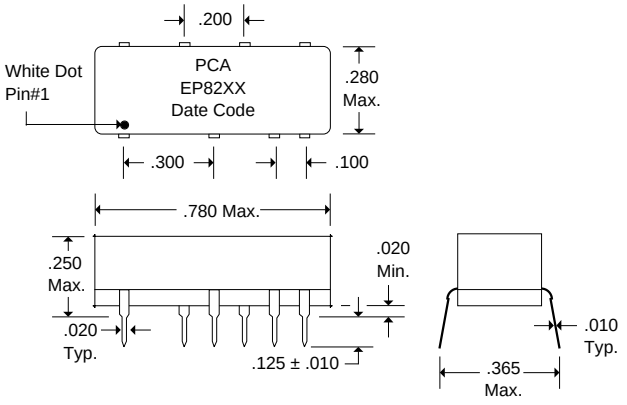
		Min	Max	Unit
V_{CC}	Supply Voltage	4.75	5.25	V
V_{IH}	High-Level Input Voltage	2.0		V
V_{IL}	Low-Level Input Voltage		0.8	V
I_{IK}	Input Clamp Current		-18	mA
I_{OH}	High-Level Output Current		-0.4	mA
I_{OL}	Low-Level Output Current		8	mA
P_W*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T_A	Operating Free-Air Temperature	0	+70	°C

**These two values are inter-dependent.*

Input Pulse Test Conditions

			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



DSD82XXb 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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