Mini SIL Single Output TTL Compatible Active Delay Lines

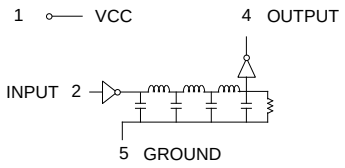
TIME DELAYS * (nS) ±5% or ±2 nS†	PART NUMBER	TIME DELAYS * (nS) ±5% or ±2 nS†	PART NUMBER
5	EP9748-5	60	EP9748-60
10	EP9748-10	75	EP9748-75
15	EP9748-15	100	EP9748-100
20	EP9748-20	125	EP9748-125
25	EP9748-25	150	EP9748-150
30	EP9748-30	175	EP9748-175
35	EP9748-35	200	EP9748-200
40	EP9748-40	225	EP9748-225
45	EP9748-45	250	EP9748-250
50	EP9748-50		

*†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		-1.2	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

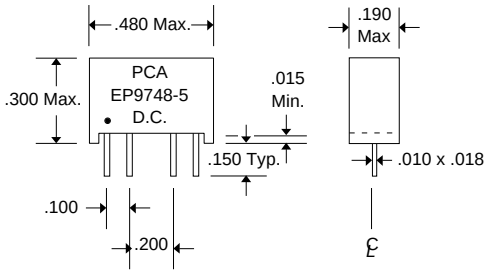
		Min	Max	Unit
V_{CC}	Supply Voltage	4.75	5.25	V
V_{IH}	High-Level Input Voltage	2.0		V
V_{IL}	Low-Level Input Voltage		0.8	V
I_{IK}	Input Clamp Current		-18	mA
I_{OH}	High-Level Output Current		-1.0	mA
I_{OL}	Low-Level Output Current		20	mA
P_W*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T_A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



DSD9748 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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