

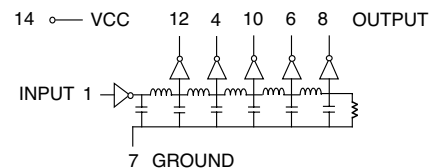
# 14 Pin DIL 5 Tap Low Profile TTL Compatible MIL 883 Active Delay Lines

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	EP9590-25	40, 80, 120, 160	200	EP9590-200
6, 12, 18, 24	30	EP9590-30	45, 90, 135, 180	225	EP9590-225
7, 14, 21, 28	35	EP9590-35	50, 100, 150, 200	250	EP9590-250
8, 16, 24, 32	40	EP9590-40	60, 120, 180, 240	300	EP9590-300
9, 18, 27, 36	45	EP9590-45	70, 140, 210, 280	250	EP9590-280
10, 20, 30, 40	50	EP9590-50	80, 160, 240, 320	400	EP9590-400
12, 24, 36, 48	60	EP9590-60	84, 168, 252, 336	420	EP9590-420
15, 30, 45, 60	75	EP9590-75	88, 176, 264, 352	440	EP9590-440
20, 40, 60, 80	100	EP9590-100	90, 180, 270, 360	450	EP9590-450
25, 50, 75, 100	125	EP9590-125	94, 188, 282, 376	470	EP9590-470
30, 60, 90, 120	150	EP9590-150	100, 200, 300, 400	500	EP9590-500
35, 70, 105, 140	175	EP9590-175			

Delay Times referenced from input to leading edges at 25°C, 5.0V, with no load.

DC Electrical Characteristics		Test Conditions	Min	Max	Unit
V <sub>OH</sub>	High-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IL</sub> = max. I <sub>OH</sub> = max	2.7		V
V <sub>OL</sub>	Low-Level Output Voltage	V <sub>CC</sub> = min. V <sub>IH</sub> = min. I <sub>OL</sub> = max		0.5	V
V <sub>IK</sub>	Input Clamp Voltage	V <sub>CC</sub> = min. I <sub>I</sub> = I <sub>IK</sub>		-1.2	V
I <sub>IH</sub>	High-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 2.7V		50	µA
		V <sub>CC</sub> = max. V <sub>IN</sub> = 5.25V		1.0	mA
I <sub>IL</sub>	Low-Level Input Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0.5V		-2	mA
I <sub>OS</sub>	Short Circuit Output Current	V <sub>CC</sub> = max. V <sub>OUT</sub> = 0. (One output at a time)	-40	-100	mA
I <sub>CCH</sub>	High-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = OPEN		75	mA
I <sub>CCL</sub>	Low-Level Supply Current	V <sub>CC</sub> = max. V <sub>IN</sub> = 0		75	mA
T <sub>RO</sub>	Output Rise Time	T <sub>d</sub> ≤ 500 nS (0.75 to 2.4 Volts)		4	nS
N <sub>H</sub>	Fanout High-Level Output	V <sub>CC</sub> = max. V <sub>OH</sub> = 2.7V		20 TTL LOAD	
N <sub>L</sub>	Fanout Low-Level Output	V <sub>CC</sub> = max. V <sub>OL</sub> = 0.5V		10 TTL LOAD	

## Schematic

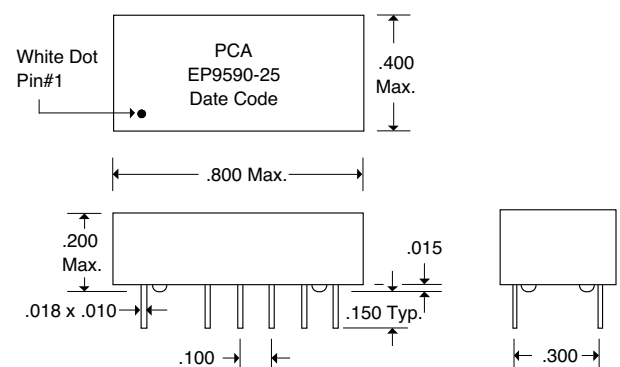


Recommended Operating Conditions		Min	Max	Unit
V <sub>CC</sub>	Supply Voltage	4.5	5.5	V
V <sub>IH</sub>	High-Level Input Voltage	2.0		V
V <sub>IL</sub>	Low-Level Input Voltage		0.8	V
I <sub>IK</sub>	Input Clamp Current		-18	mA
I <sub>OH</sub>	High-Level Output Current		-1.0	mA
I <sub>OL</sub>	Low-Level Output Current		20	mA
PW*	Pulse Width of Total Delay	40		%
d*	Duty Cycle		40	%
T <sub>A</sub>	Operating Free-Air Temperature	-55	+125	°C

\*These two values are inter-dependent.

Input Pulse Test Conditions @ 25° C		Unit
E <sub>IN</sub>	Pulse Input Voltage	3.2 Volts
PW	Pulse Width % of Total Delay	110 %
T <sub>RI</sub>	Pulse Rise Time (0.75 - 2.4 Volts)	2.0 nS
PRR	Pulse Repetition Rate @ T <sub>d</sub> ≤ 200 nS	1.0 MHz
	Pulse Repetition Rate @ T <sub>d</sub> > 200 nS	100 KHz
V <sub>CC</sub>	Supply Voltage	5.0 Volts

## Package Dimensions



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