14 Pin DIP Delayed Pulse Width Generator TTL Compatible Active Delay Line Modules

Features

- Precise output pulse width
- Positive-edge triggered (10 nS) min.
- Fast rise and fall time (4 nS max. measured from 0.75V to 2.4V)
- Low Profile 14 pin DIP for auto-insertion
- Propagation Delays : 7 ± 2 nS from pin 8 to pin 1
  : 7 ± 2 nS from pin 8 to pin 13

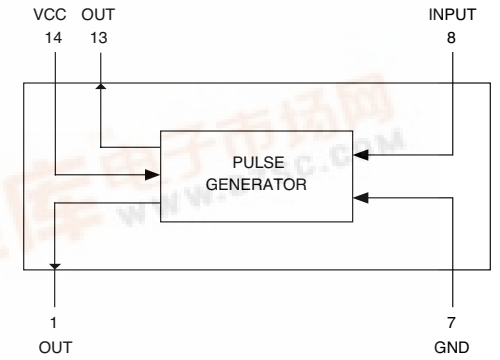
PART NUMBER	PULSE WIDTH * ±2 NS or ±5%† (P_{WO})	MAX OUTPUT FREQ (mHz)
EP9981-5	5	100
EP9981-10	10	50
EP9981-15	15	33
EP9981-20	20	25
EP9981-25	25	20
EP9981-30	30	16
EP9981-35	35	14
EP9981-40	40	12
EP9981-45	45	11
EP9981-50	50	10
EP9981-60	60	8.4
EP9981-70	70	7.1
EP9981-80	80	6.3
EP9981-90	90	5.5
EP9981-100	100	5.0

** Measured at 1.5V Levels*
† Whichever is greater.

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		-1.2V	V
I_{IH}	High-Level Input Current	V_{CC}= max. V_{IN}= 2.7V		50	µA
I_{IL}	Low-Level Input Current	V_{CC}= max. V_{IN} = 0.5V		-2	mA
I_{OS}	Short Circuit Output Current	V_{CC}= max.	-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
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	Period	P_{WO} x2		nS
P_{WI}	Input Pulse Width	10		nS
T_A	Operating Free-Air Temperature	0	+70	°C

Input Pulse Test Conditions @ 25° C

			Unit
E_{IN}	Pulse Input Voltage	3.2	Volts
T_{RI}	Pulse Rise Time	2.0	nS
P_{WI}	Pulse Width	10	nS
P	Period	P_{WO} x2	nS
	(For EP9981-5)	20	nS
V_{CC}	Supply Voltage	5.0	Volts

Package