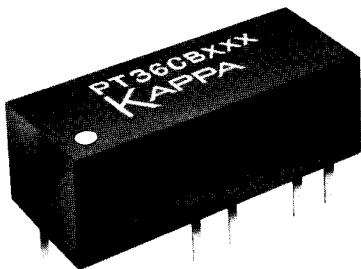


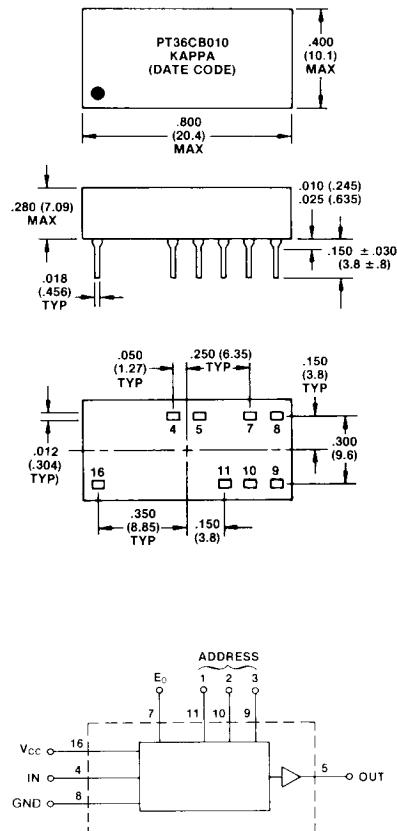
SERIES PT36 TTL SCHOTTKY (16-PIN) 3-BIT PROGRAMMABLE DELAY LINE



FEATURES

- Inherent Delay: 7 ns \pm 1 ns
- 16-Pin DIL package
- Total Delay Tolerance: \pm 5% or \pm 1 ns, WIG
- TTL Schottky Interfaced

MARKINGS AND DIMENSIONS, in (mm)



RECOMMENDED OPERATING CONDITIONS

		MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage	4.75	5.00	5.25	V
V_{IH}	High-Level Input Voltage	2.0		0.8	V
V_{IL}	Low-Level Input Voltage			-18	V
I_{IK}	Input Clamp Current			-1.0	mA
I_{OH}	High-Level Output Current			20	mA
I_{OL}	Low-Level Output Current			+70	mA
T_A	Operating Free-Air Temperature	0	+25	+70	°C

DC ELECTRICAL CHARACTERISTICS

	TEST CONDITIONS			
V_{OH}	$V_{CC} = \text{min}$, $V_{IL} = \text{max}$, $I_{OH} = \text{max}$	2.7	3.4	V
V_{OL}	$V_{CC} = \text{min}$, $V_{IH} = \text{min}$, $I_{OL} = \text{max}$		0.5	V
V_{IK}	$V_{CC} = \text{min}$, $I_I = I_{IK}$		-1.2	V
I_{IH}	$V_{CC} = \text{max}$, $V_{IN} = 2.7V$		50	μA
I_{IL}	$V_{CC} = \text{max}$, $V_{IN} = 5.25V$		1.0	mA
I_{OS}	$V_{CC} = \text{max}$, $V_{IN} = 0.5V$		-2	mA
I_{CH}	$V_{CC} = \text{max}$, $V_{OUT} = 0$, one output at a time		-100	mA
I_{CL}	$V_{CC} = \text{max}$, $V_{IN} = \text{OPEN}$		90	mA
N_H	$V_{CC} = \text{max}$, $V_{OH} = 2.7V$		115	mA
N_L	$V_{CC} = \text{max}$, $V_{OL} = 0.5V$		20	TTL load
			10	TTL load

INPUT PULSE TEST CONDITIONS

	TEST CONDITIONS			
E_{IN}	Pulse Voltage	3.1	3.2	V
T_{RI}	Pulse Rise-Time	50	100	ns
T_W	Pulse Width, of Total Delay		2.0	%
d	Duty Cycle		50	%

FUNCTION TABLE

Enable	Address (Bit No.)			Delay Out
	3	2	1	
L	L	L	L	T_0
L	L	L	H	T_1
L	L	H	L	T_2
L	L	H	H	T_3
L	H	L	L	T_4
L	H	L	H	T_5
L	H	H	L	T_6
L	H	X	X	T_7
H	X	X	X	L

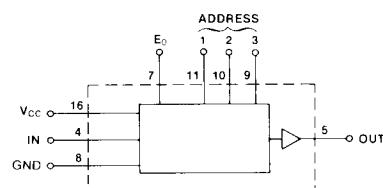
H = High

L = Low

X = Don't care

T_0 = Reference or Inherent delay of circuit.

T_1 to T_7 = Multiplier of incremental delay.



Part ⁽²⁾ Number	Incremental Delay Per Step ⁽³⁾	Total Delay ⁽¹⁾ Change
PT36CB010	1 ns \pm .4 ns	7 ns
PT36CB020	2 ns \pm .4 ns	14 ns
PT36CB030	3 ns \pm .5 ns	21 ns
PT36CB050	5 ns \pm .6 ns	35 ns
PT36CB100	10 ns \pm 1.0 ns	70 ns
PT36CB150	15 ns \pm 1.3 ns	105 ns
PT36CB200	20 ns \pm 1.5 ns	140 ns
PT36CB400	40 ns \pm 2.0 ns	280 ns
PT36CB500	50 ns \pm 2.5 ns	350 ns

1. This delay value does not include the T_0 delay.

2. Other delays also available upon request.

3. $V_{CC} = T_{YP}$, $E_{IN} = T_{YP}$, $T_{RI} = \text{Max}$, $T_W = T_{YP}$, $d = T_{YP}$, $T_A = T_{YP}$

KAPPA[®]

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