

Delay Lines

Active Delay Lines

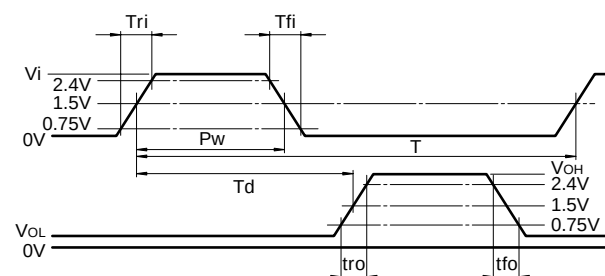
Lead

EDL Series

MEASURING CONDITIONS

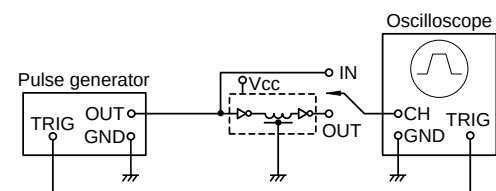
Input voltage V_i	3.2V
Pulse width conversion P_w	$T_d(\text{Total delay time}) \times 3$
Repeat cycle T	$P_w \times 10$ [Duty: 10%]
Input rise time T_{ri}	5ns max.
Power supply voltage V_{cc}	$5 \pm 0.1V$
Ambient temperature T_a	$25 \pm 1^\circ C$

WAVEFORMS



V_i : Input voltage
 T_d : Total delay time
 P_w : Pulse width conversion
 T_{ri} : Input rise time
 T_{fi} : Input fall time
 t_{ro} : Output rise time
 t_{fo} : Output fall time
 V_{OL} : Output voltage(L level)
 V_{OH} : Output voltage(H level)

MEASURING CIRCUITS



INPUT/OUTPUT CHARACTERISTICS

Item	Measuring conditions	Standard value		
		Minimum	Nominal	Maximum
Power supply voltage V_{cc}		4.75V	5V	5.25V
Input voltage (H level) V_{IH}		2V	—	—
Input voltage (L level) V_{IL}		—	—	0.8V
Output voltage (H level) V_{OH}	$V_{cc}=4.75V$ $V_{IH}=2V$ $I_{OH}=-1mA$	2.7V	3.4V	—
Output voltage (L level) V_{OL}	$V_{cc}=4.75V$ $V_{IL}=0.8V$ $I_{OL}=20mA$	—	—	0.5V
Input current (H level) I_{IH}	$V_{cc}=5.25V$ $V_i=2.7V$	—	—	50μA
Input current (L level) I_{IL}	$V_{cc}=5.25V$ $V_i=0.5V$	—	—	-2mA
Power supply current I_{ccl}	$V_{cc}=5.25V$ $V_{IL}=0V$	—	45mA	70mA

OUTPUT LOAD CONDITIONS

Logic 1 output	20TTL load/tap [$I_{OH}/I_{IH}=1mA/50μA=20$]
Logic 0 output	10TTL load/tap [$I_{OH}/I_{IL}=20mA/2mA=10$]