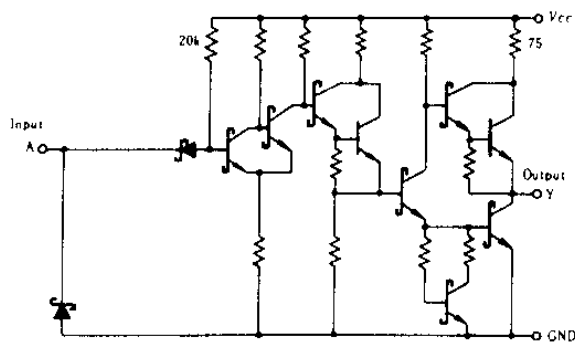
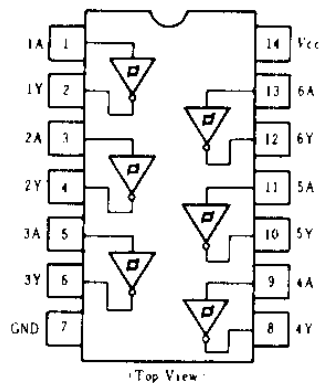


## ■ CIRCUIT SCHEMATIC (1/6)



## ■ PIN ARRANGEMENT



## ■ ELECTRICAL CHARACTERISTICS (Ta = -20 ~ +75°C)

Item	Symbol	Test Conditions	min	typ*	max	Unit
Input threshold voltage	$V_{T^+}$	$V_{CC}=5V$	1.4	1.6	1.9	V
	$V_{T^-}$	$V_{CC}=5V$	0.5	0.7	1.0	V
Hysteresis	$V_{T^+} - V_{T^-}$	$V_{CC}=5V$	0.4	0.9	—	V
Output voltage	$V_{OH}$	$V_{CC}=4.75V, V_I=0.5V, I_{OH}=-400\mu A$	2.7	—	—	V
	$V_{OL}$	$V_{CC}=4.75V, V_I=1.9V$	$I_{OL}=8mA$	—	0.50	V
			$I_{OL}=4mA$	—	0.40	
Input threshold current	$I_{T^+}$	$V_{CC}=5V, V_I=V_{T^+}$	—	-0.14	—	mA
	$I_{T^-}$	$V_{CC}=5V, V_I=V_{T^-}$	—	-0.18	—	mA
Input current	$I_{IH}$	$V_{CC}=5.25V, V_I=2.7V$	—	—	20	$\mu A$
	$I_{IL}$	$V_{CC}=5.25V, V_I=0.4V$	—	—	-0.4	mA
	$I_I$	$V_{CC}=5.25V, V_I=7V$	—	—	0.1	mA
Short-circuit output current	$I_{OS}$	$V_{CC}=5.25V$	-20	—	-100	mA
Supply current	$I_{CCH}$	$V_{CC}=5.25V$	—	8.6	16	mA
	$I_{CCL}$	$V_{CC}=5.25V$	—	12	21	mA
Input clamp voltage	$V_{IK}$	$V_{CC}=4.75V, I_{IN}=-18mA$	—	—	-1.5	V

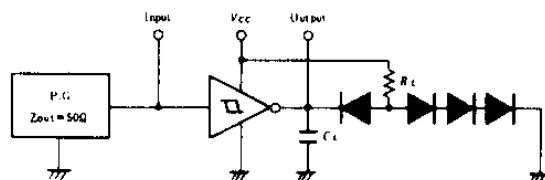
\*  $V_{CC}=5V, T_a=25^\circ C$

## ■ SWITCHING CHARACTERISTICS ( $V_{CC}=5V, T_a=25^\circ C$ )

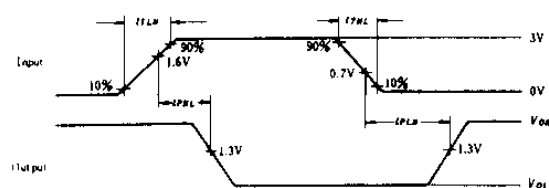
Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	$t_{PLH}$	$C_L=15pF, R_L=2k\Omega$	—	15	22	ns
	$t_{PHL}$		—	15	22	ns

## ■ TESTING METHOD

### 1. Test Circuit

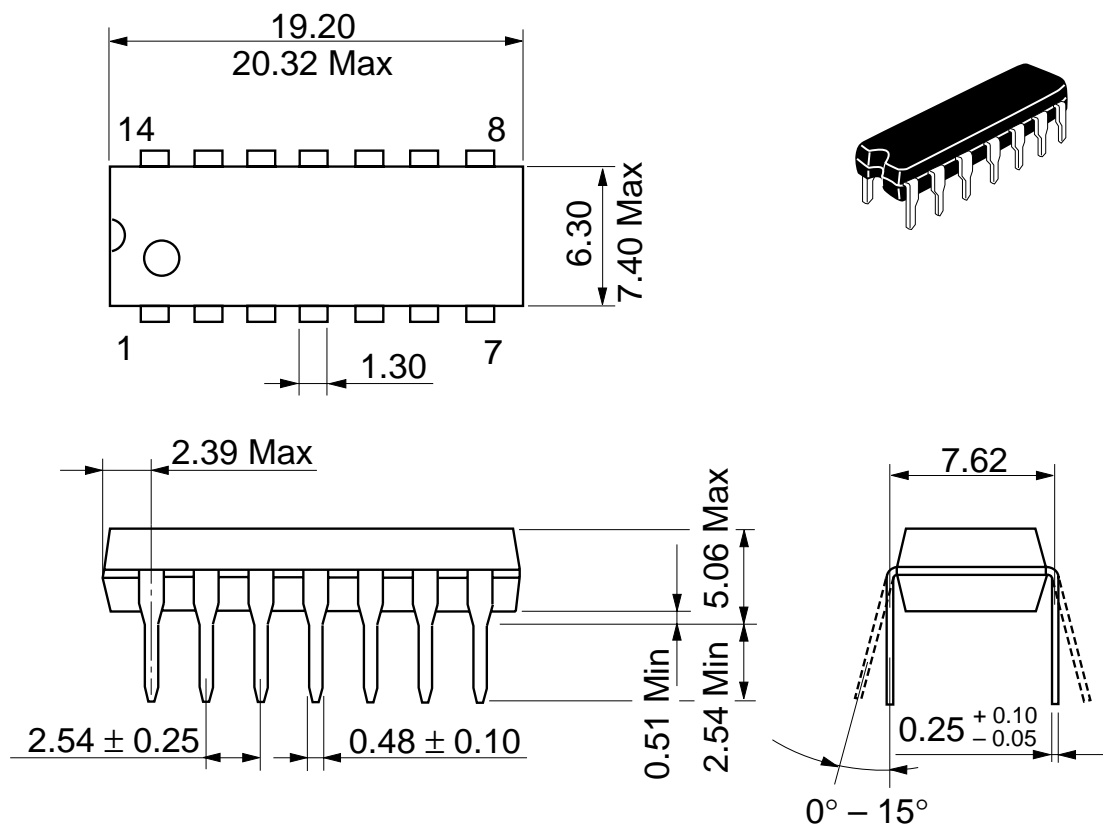


### Waveform



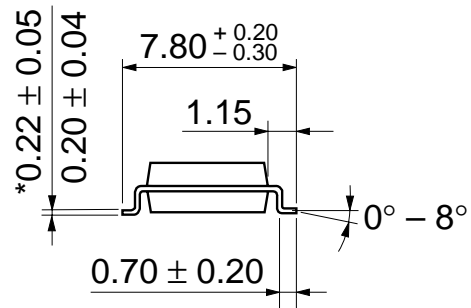
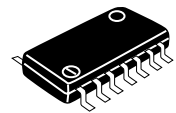
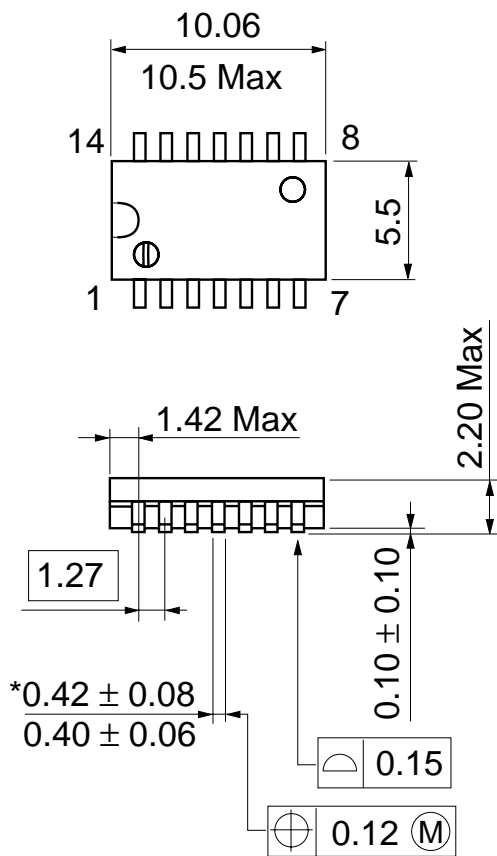
- Notes) 1. Input pulse;  $t_{TLH} \leq 15ns, t_{THL} \leq 6ns, PRR=1MHz$ , duty cycle=50%  
 2.  $C_L$  includes probe and jig capacitance.  
 3. All diodes are 1S2074  $\oplus$ .

Unit: mm



Hitachi Code	DP-14
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.97 g

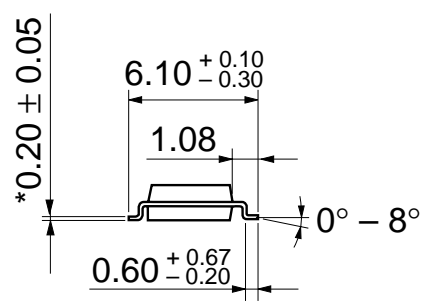
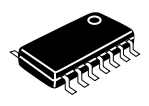
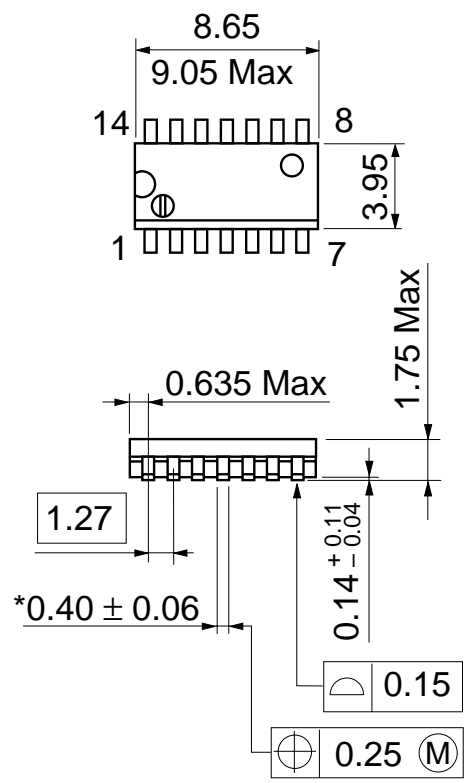
Unit: mm



Hitachi Code	FP-14DA
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.23 g

\*Dimension including the plating thickness  
Base material dimension

Unit: mm



\*Pd plating

Hitachi Code	FP-14DN
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.13 g

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