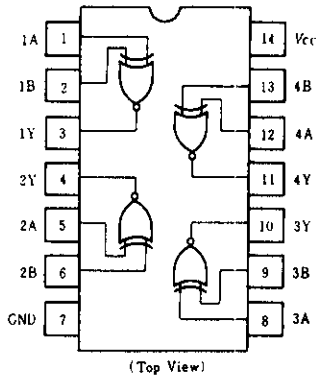


# HD74LS266

● Quadruple 2-input Exclusive-NOR Gates  
(with open collector outputs)

## ■ PIN ARRANGEMENT



## ■ FUNCTION TABLE

Inputs		Output
A	B	Y
L	L	H
L	H	L
H	L	L
H	H	H

H; high level, L; low level

## ■ RECOMMENDED OPERATING CONDITIONS

Item	Symbol	min	typ	max	Unit
High level output voltage	$V_{OH}$	—	—	5.5	V
Low level output current	$I_{OL}$	—	—	8	mA

## ■ ELECTRICAL CHARACTERISTICS ( $T_a = -20 \sim +75^\circ\text{C}$ )

Item	Symbol	Test Conditions	min	typ*	max	Unit	
Input voltage	$V_{IH}$		2.0	—	—	V	
	$V_{IL}$		—	—	0.8		
Output current	$I_{OH}$	$V_{CC} = 4.75\text{V}, V_{IH} = 2\text{V}, V_{IL} = 0.8\text{V}, V_{OH} = 5.5\text{V}$	—	—	100	$\mu\text{A}$	
Output voltage	$V_{OL}$	$V_{CC} = 4.75\text{V}, V_{IH} = 2\text{V}, V_{IL} = 0.8\text{V}$	$I_{OL} = 4\text{mA}$	—	—	0.4	V
			$I_{OL} = 8\text{mA}$	—	—	0.5	
Input current	$I_{IH}$	$V_{CC} = 5.25\text{V}, V_i = 2.7\text{V}$	—	—	40	$\mu\text{A}$	
	$I_{iL}$	$V_{CC} = 5.25\text{V}, V_i = 0.4\text{V}$	—	—	-0.8	mA	
	$I_i$	$V_{CC} = 5.25\text{V}, V_i = 7\text{V}$	—	—	0.2	mA	
Supply current	$I_{CC}^{**}$	$V_{CC} = 5.25\text{V}$	—	8	13	mA	
Input clamp voltage	$V_{iK}$	$V_{CC} = 4.75\text{V}, I_{iK} = -18\text{mA}$	—	—	-1.5	V	

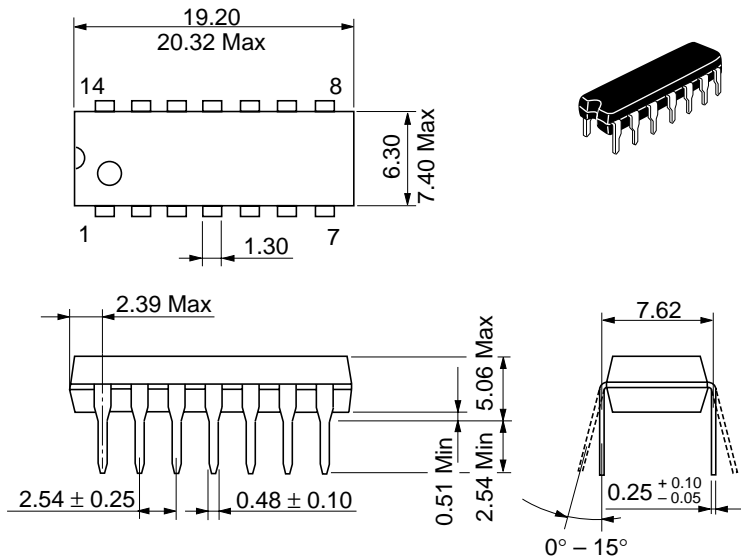
\*  $V_{CC} = 5\text{V}, T_a = 25^\circ\text{C}$

\*\*  $I_{CC}$  is measured with one input of each gate at 4.5V, the other inputs grounded, and the outputs open.

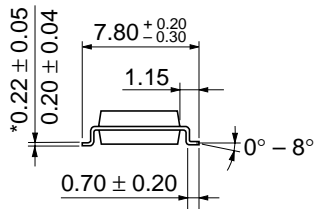
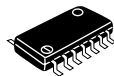
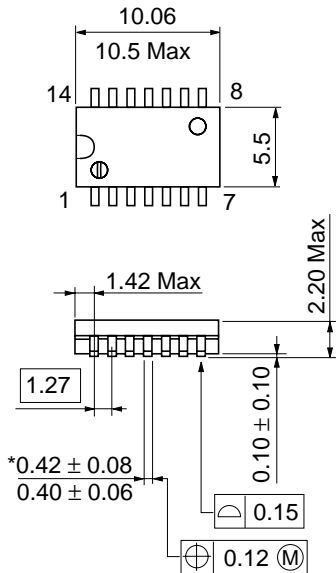
## ■ SWITCHING CHARACTERISTICS ( $V_{CC} = 5\text{V}, T_a = 25^\circ\text{C}$ )

Item	Symbol	Inputs	Test Conditions	min	typ	max	Unit
Propagation delay time	$t_{PLH}$	A or B	$C_L = 15\text{pF}$ $R_L = 2\text{k}\Omega$	—	18	30	ns
	$t_{PHL}$			—	18	30	
	$t_{PLH}$	A or B		—	18	30	
	$t_{PHL}$			—	18	30	

Note) Refer to Test Circuit and Waveform of the Common Item

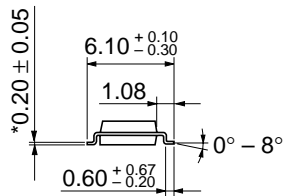
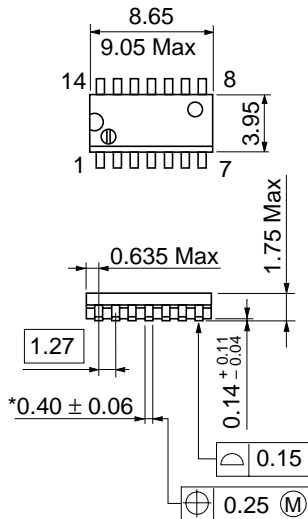


Hitachi Code	DP-14
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.97 g



\*Dimension including the plating thickness  
Base material dimension

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



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

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