

# HD74AC02

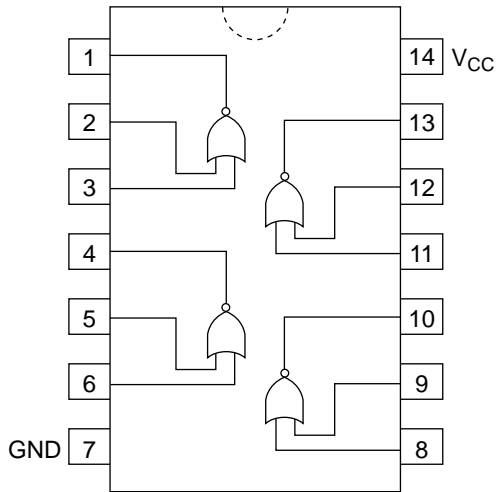
Quad 2-Input NOR Gate

# HITACHI

## Feature

- Outputs Source/Sink 24 mA

## Pin Arrangement



(Top view)

## DC Characteristics (unless otherwise specified)

Item	Symbol	Max	Unit	Condition
Maximum quiescent supply current	$I_{CC}$	40	$\mu\text{A}$	$V_{IN} = V_{CC}$ or ground, $V_{CC} = 5.5 \text{ V}$ , $T_a = \text{Worst case}$
Maximum quiescent supply current	$I_{CC}$	4.0	$\mu\text{A}$	$V_{IN} = V_{CC}$ or ground, $V_{CC} = 5.5 \text{ V}$ , $T_a = 25^\circ\text{C}$

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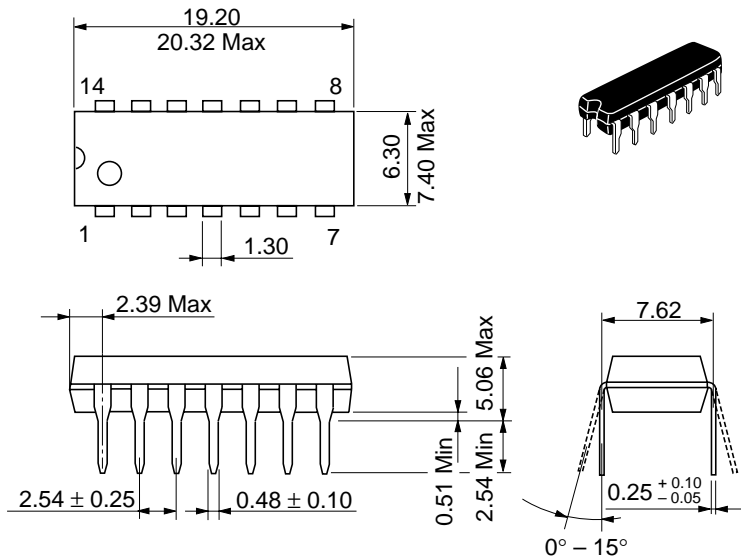
## AC Characteristics

Item	Symbol	$V_{CC}$ (V) <sup>*1</sup>	$T_a = +25^{\circ}\text{C}$ $C_L = 50\text{ pF}$			$T_a = -40^{\circ}\text{C to } +85^{\circ}\text{C}$ $C_L = 50\text{ pF}$		Unit
			Min	Typ	Max	Min	Max	
Propagation delay	$t_{PLH}$	3.3	1.0	5.0	7.5	1.0	8.0	ns
		5.0	1.0	4.0	6.0	1.0	6.5	
Propagation delay	$t_{PHL}$	3.3	1.0	5.0	7.5	1.0	8.0	ns
		5.0	1.0	4.5	6.5	1.0	7.0	

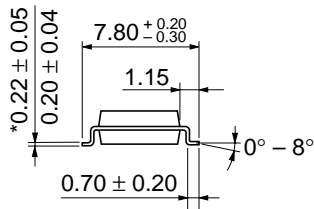
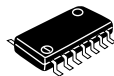
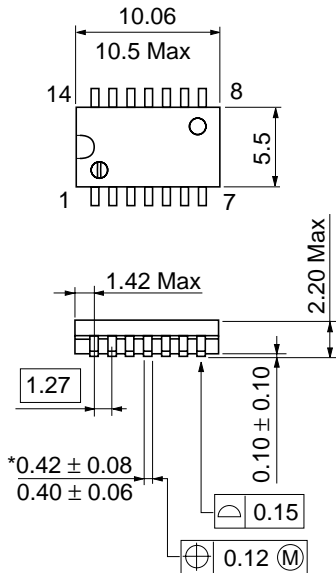
Note: 1. Voltage Range 3.3 is  $3.3\text{ V} \pm 0.3\text{ V}$   
Voltage Range 5.0 is  $5.0\text{ V} \pm 0.5\text{ V}$

## Capacitance

Item	Symbol	Typ	Unit	Condition
Input capacitance	$C_{IN}$	4.5	pF	$V_{CC} = 5.5\text{ V}$
Power dissipation capacitance	$C_{PD}$	30.0	pF	$V_{CC} = 5.0\text{ V}$

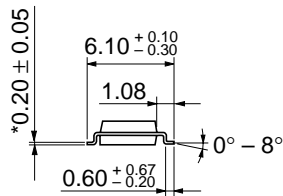
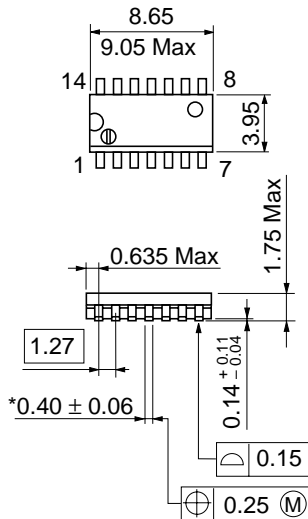


Hitachi Code	DP-14
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.97 g

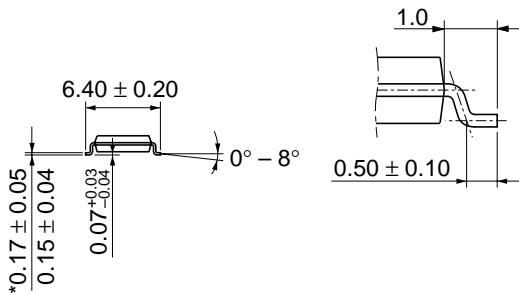
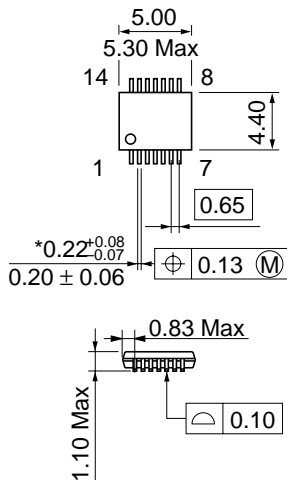


Hitachi Code	FP-14DA
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.23 g

\*Dimension including the plating thickness  
Base material dimension



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



\*Dimension including the plating thickness  
 Base material dimension

Hitachi Code	TTP-14D
JEDEC	—
EIAJ	—
Weight (reference value)	0.05 g

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