

HD74AC08

Quad 2-Input AND Gate

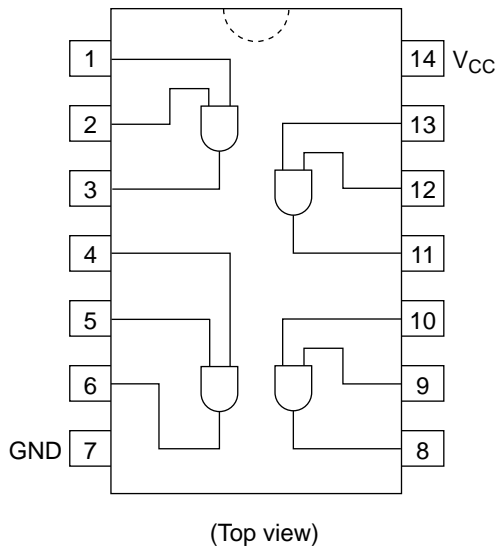
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ADE-205-358 (Z)
1st. Edition
Sep. 2000

Feature

- Outputs Source/Sink 24 mA

Pin Arrangement



DC Characteristics (unless otherwise specified)

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

AC Characteristics

Item	Symbol	V _{CC} (V)*1	Ta = +25°C C _L = 50 pF			Ta = -40°C to +85°C C _L = 50 pF		Unit
			Min	Typ	Max	Min	Max	
Propagation delay	t _{PLH}	3.3	1.0	7.5	9.5	1.0	10.0	ns
		5.0	1.0	5.5	7.5	1.0	8.5	
Propagation delay	t _{PHL}	3.3	1.0	7.0	8.5	1.0	9.0	ns
		5.0	1.0	5.5	7.0	1.0	7.5	

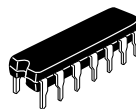
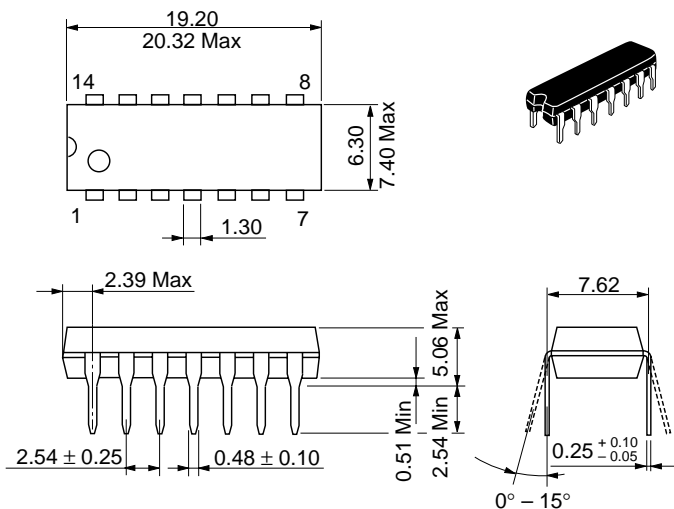
Note: 1. Voltage Range 3.3 is 3.3 V ± 0.3 V
Voltage Range 5.0 is 5.0 V ± 0.5 V

Capacitance

Item	Symbol	Typ	Unit	Condition
Input capacitance	C _{IN}	4.5	pF	V _{CC} = 5.5 V
Power dissipation capacitance	C _{PD}	20.0	pF	V _{CC} = 5.0 V

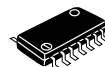
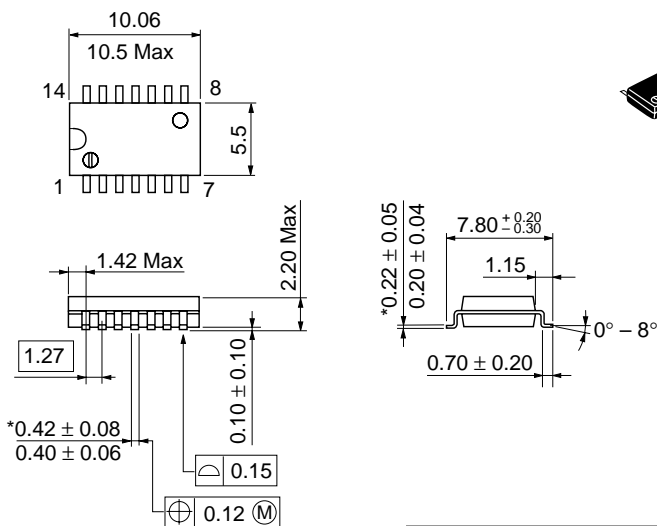
Package Dimensions

Unit: mm



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

Unit: mm

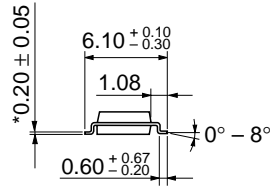
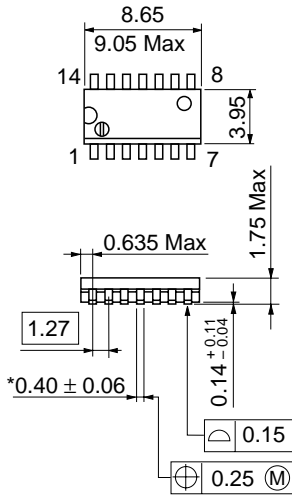


Hitachi Code	FP-14DA
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.23 g

*Dimension including the plating thickness
Base material dimension

HD74AC08

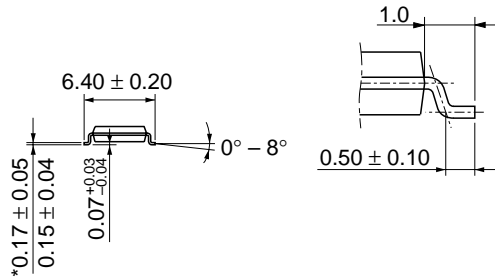
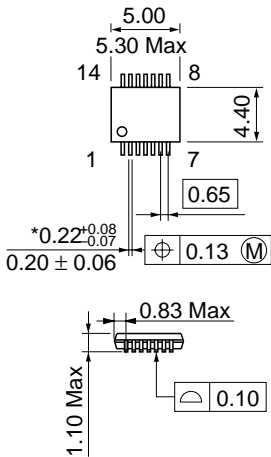
Unit: mm



*Pd plating

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

Unit: mm



*Dimension including the plating thickness
Base material dimension

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

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