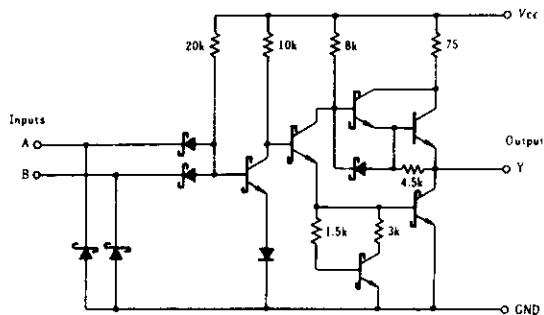


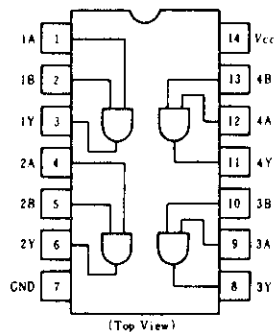
HD74LS08

● **Quadruple 2-input Positive AND Gates**

■CIRCUIT SCHEMATIC(1/4)



■ PIN ARRANGEMENT



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

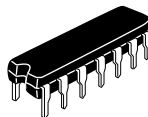
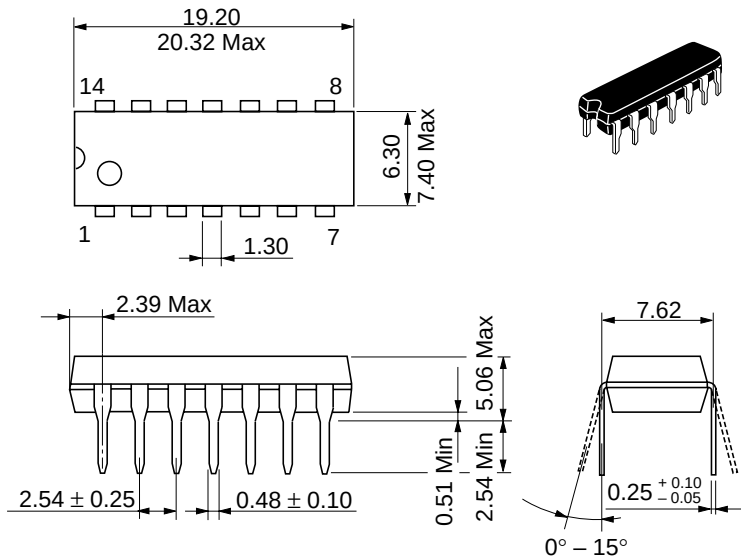
Item	Symbol	Test Conditions	min	typ*	max	Unit
Input voltage	V_{IH}		2.0	—	—	V
	V_{IL}		—	—	0.8	V
Output voltage	V_{OH}	$V_{CC}=4.75V, V_{IH}=2V, I_{OH}=-400\mu A$	2.7	—	—	V
	V_{OL}	$V_{CC}=4.75V, V_{IL}=0.8V$	$I_{OL}=8mA$	—	0.5	V
			$I_{OL}=4mA$	—	0.4	
Input current	I_{IH}	$V_{CC}=5.25V, V_I=2.7V$	—	—	20	μA
	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}	$V_{CC}=5.25V$	—	2.4	4.8	mA
	I_{CCL}		—	4.4	8.8	
Input clamp voltage	V_{IK}	$V_{CC}=4.75V, I_{IN}=-18mA$	—	—	-1.5	V

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

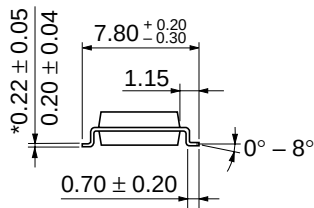
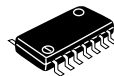
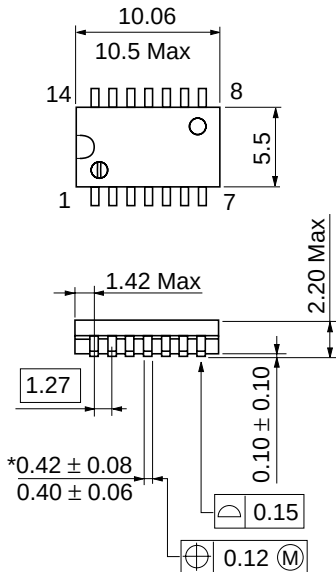
■ SWITCHING CHARACTERISTICS ($V_{CC}=5V$, $T_a=25^{\circ}C$)

Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	t_{PLH}	$C_L = 15\text{pF}, R_L = 2\text{k}\Omega$	—	8	15	ns
	t_{PHL}		—	10	20	

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

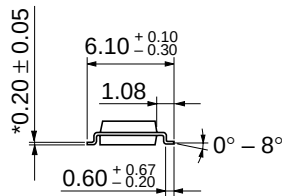
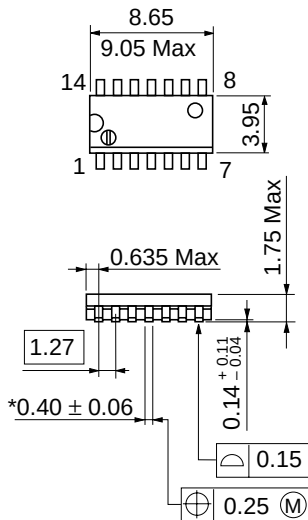


Hitachi Code	DP-14
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.97 g



*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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