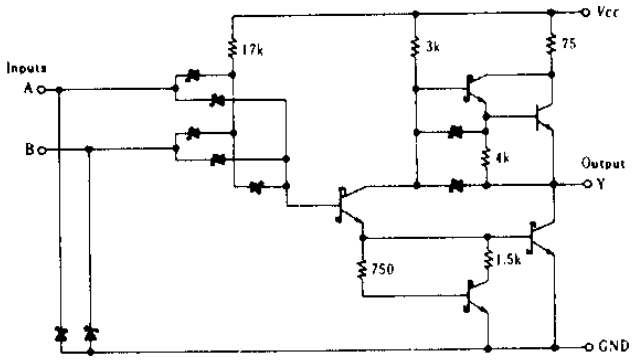
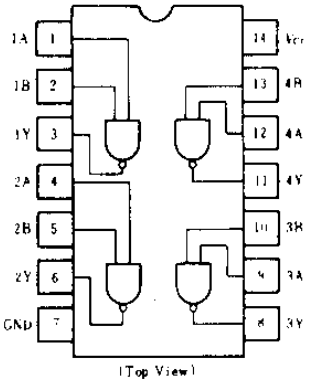
HD74LS37 ●Quadruple 2-input Positive NAND Buffers

■CIRCUIT SCHEMATIC(¼)



■PIN ARRANGEMENT



(Top View)

■RECOMMENDED OPERATING CONDITIONS

Item	Symbol	min	typ	max	Unit
High level output current	I_{OH}	–	–	−1.2	mA
Low level output current	I_{OL}	–	–	24	mA

■ELECTRICAL CHARACTERISTICS (Ta= −20～+75℃)

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_{IL}=0.8V, I_{OH}=−1.2mA		2.7	–	–	V
	V_{OL}	V_{CC}=4.75V, V_{IH}=2V	I_{OL}=24mA	–	–	0.5	V
			I_{OL}=12mA	–	–	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		−30	–	−130	mA
Supply current	I_{CCH}	V_{CC}=5.25V		–	0.9	2.0	mA
	I_{CCL}	V_{CC}=5.25V		–	6	12	mA
Input clamp voltage	V_{IK}	V_{CC}=4.75V, I_{IN}=−18mA		–	–	−1.5	V

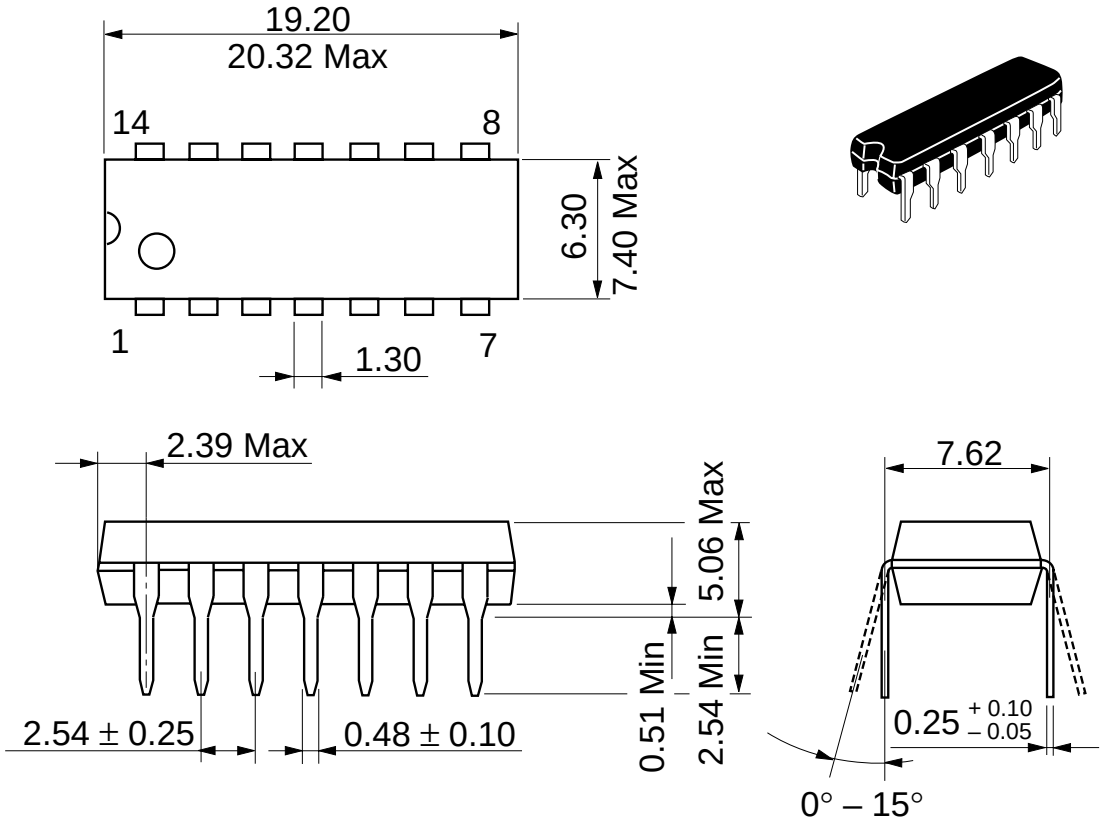
* V_{CC}=5V, Ta=25°C

■SWITCHING CHARACTERISTICS (V_{CC}=5V, Ta=25℃)

Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	t_{PLH}	C_L=45pF, R_L=667Ω	–	12	24	ns
	t_{PHL}		–	12	24	ns

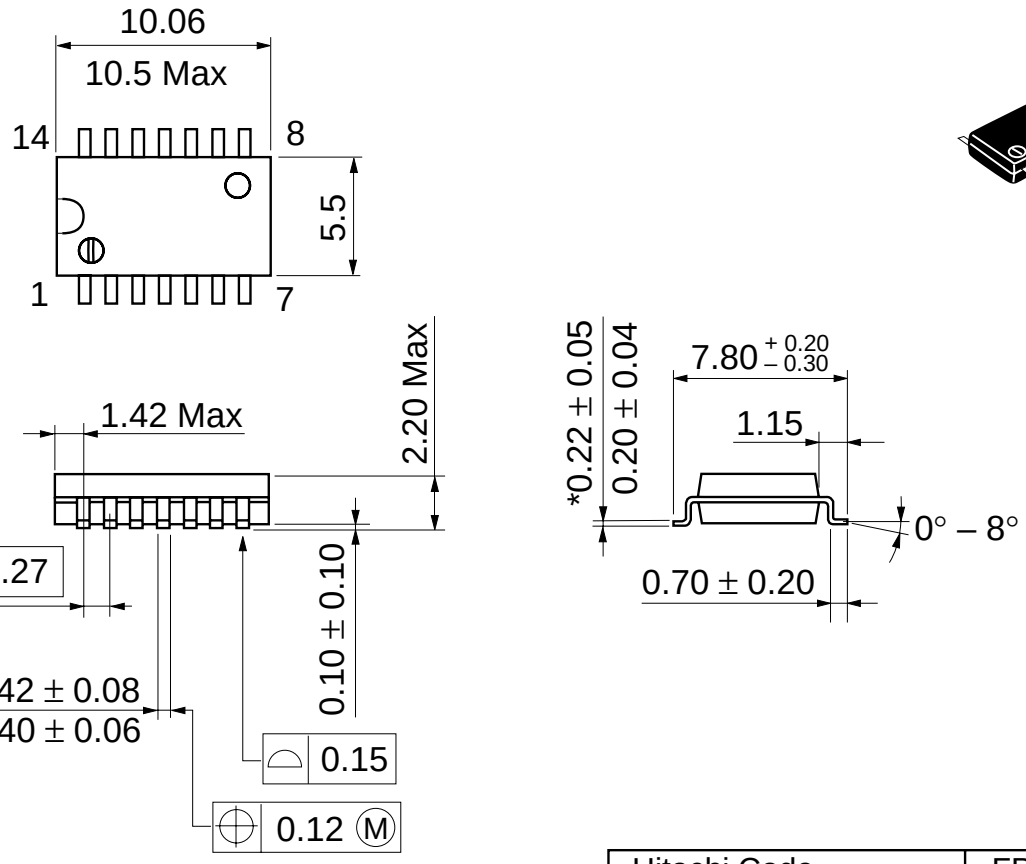
Note) Refer to Test Circuit and Waveform of the Common Item

Unit: mm



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

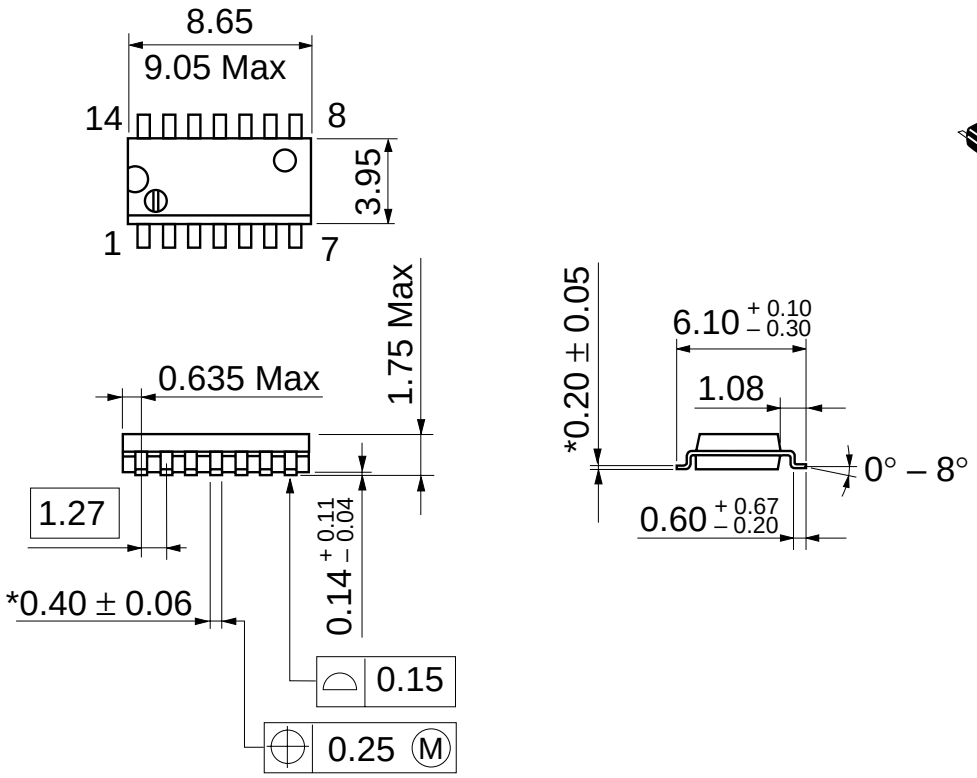
Unit: mm

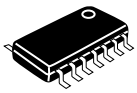


*Dimension including the plating thickness
Base material dimension

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

Unit: mm





*Pd plating

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

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