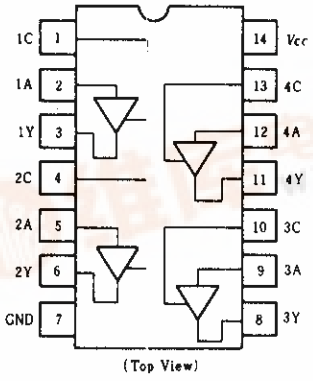
HD74LS126A ●Quadruple Bus Buffer Gates (with three-state outputs)

■PIN ARRANGEMENT



(Top View)

■FUNCTION TABLE

Inputs		Outputs
C	A	Y
L	X	Z
H	H	H
H	L	L

Note) H; high level,
L; low level,
X; irrelevant
Z; off (high-impedance) state of a 3-state output

■RECOMMENDED OPERATING CONDITIONS

Item	Symbol	min	typ	max	Unit
High level output current	I_{OH}	–	–	−2.6	mA
Low level output current	I_{OL}	–	–	24	mA

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

Item	Symbol	Test Conditions		min	typ*	max	Unit
Input voltage	V_{IH}			2.0	–	–	V
	V_{IL}			–	–	0.8	
Output voltage	V_{OH}	V_{CC}=4.75V, V_{IH}=2V, V_{IL}=0.8V, I_{OH}=−2.6mA		2.4	–	–	V
	V_{OL}	V_{CC}=4.75V, V_{IH}=2V, V_{IL}=0.8V	I_{OL}=24mA	–	–	0.5	
			I_{OL}=12mA	–	–	0.4	
Off-state output current	I_{OZH}	V_{CC}=5.25V, V_{IH}=2V, V_{IL}=0.8V	V_O=2.4V	–	–	20	μA
	I_{OZL}		V_O=0.4V	–	–	−20	
Input current	I_{IH}	V_{CC}=5.25V, V_{IH}=2.7V		–	–	20	μA
	I_{IL}	V_{CC}=5.25V, V_I=0.4V	A input	–	–	−0.4	mA
			C input	–	–	−0.4	
	I_I	V_{CC}=5.25V, V_I=7V		–	–	0.1	mA
Short-circuit output current	I_{OS}	V_{CC}=5.25V		−40	–	−225	mA
Supply current	I_{CC}**	V_{CC}=5.25V		–	12	22	mA
Input clamp voltage	V_{IK}	V_{CC}=4.75V, I_{IN}=−18mA		–	–	−1.5	V

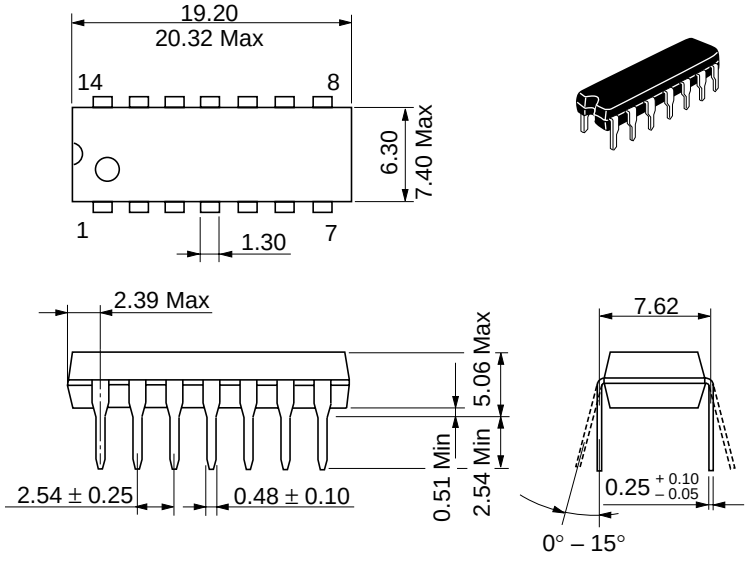
* V_{CC}=5V, Ta=25°C
** I_{CC} is measured with the A and C input grounded.

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

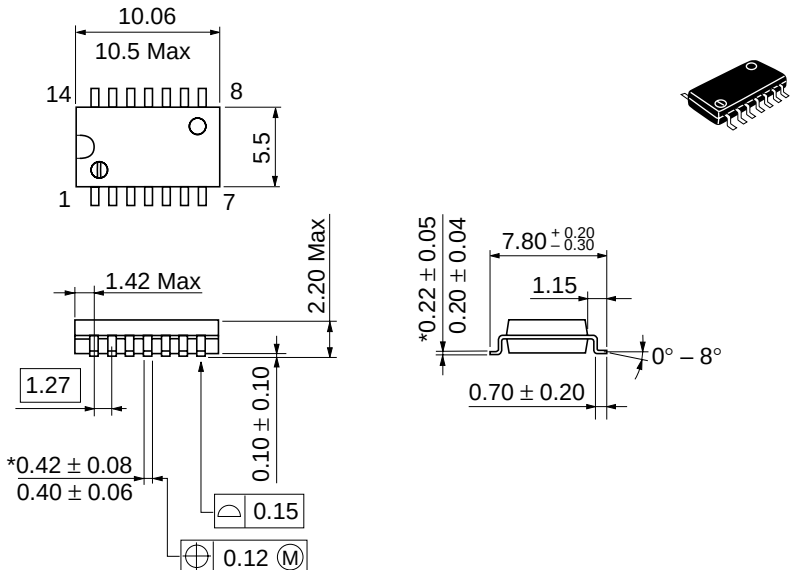
Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	t_{PLH}	C_L=45pF R_L=667Ω	–	9	15	ns
	t_{PHL}		–	8	18	
Output enable time	t_{ZH}		–	16	25	ns
	t_{ZL}		–	21	35	
Output disable time	t_{HZ}	C_L=5pF R_L=667Ω	–	–	25	ns
	t_{LZ}		–	–	25	

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

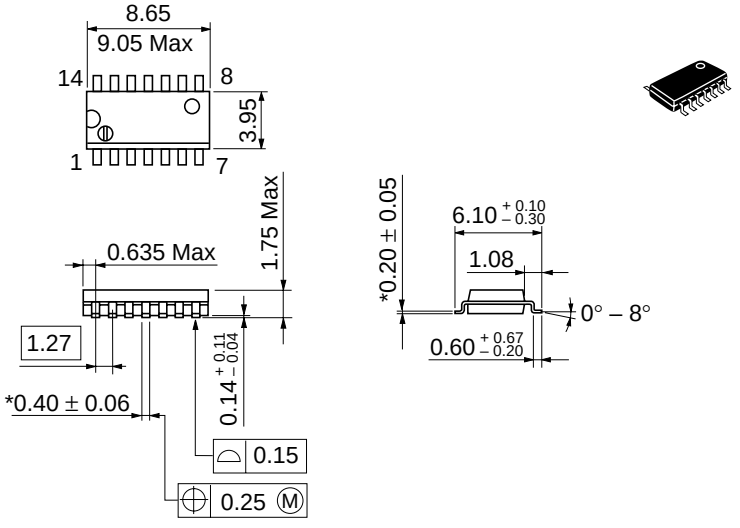
Unit: mm


19.20
20.32 Max
14
8
6.30
7.40 Max
1
1.30
7
2.39 Max
5.06 Max
0.51 Min
2.54 Min
2.54 ± 0.25
0.48 ± 0.10
7.62
0.25 +0.10 −0.05
0° – 15°

Unit: mm


10.06
10.5 Max
14
8
1
7
5.5
1.42 Max
2.20 Max
1.27
0.10 ± 0.10
*0.42 ± 0.08
0.40 ± 0.06
0.15
0.12 M
*0.22 ± 0.05
0.20 ± 0.04
7.80 +0.20 −0.30
1.15
0° – 8°
0.70 ± 0.20

Unit: mm


8.65
9.05 Max
14
8
3.95
1
7
1.75 Max
0.635 Max
1.27
*0.40 ± 0.06
0.14 +0.11 −0.04
0.15
0.25 M
*0.20 ± 0.05
6.10 +0.10 −0.30
1.08
0° – 8°
0.60 +0.67 −0.20

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