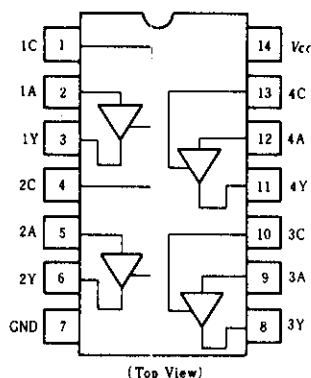


HD74LS126A • Quadruple Bus Buffer Gates (with three-state outputs)

■ PIN ARRANGEMENT



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

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

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

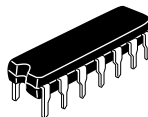
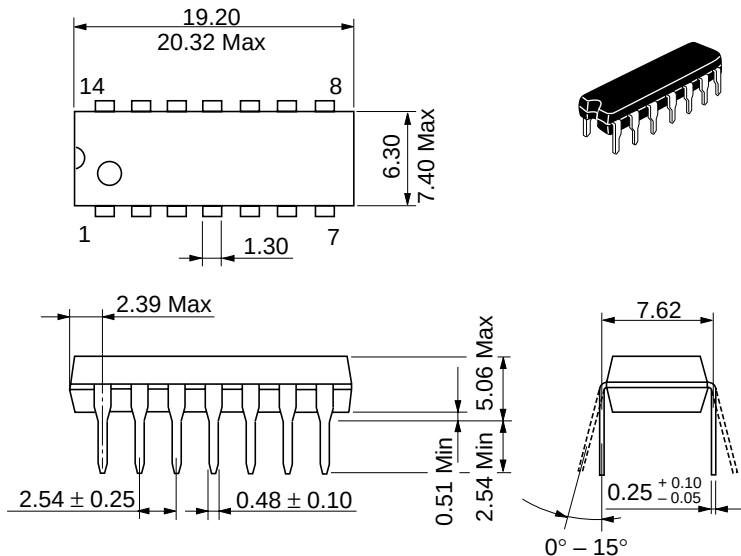
** I_{CC} is measured with the A and C input grounded.

HD74LS126A

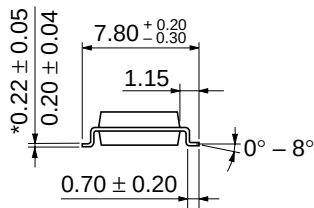
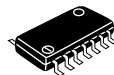
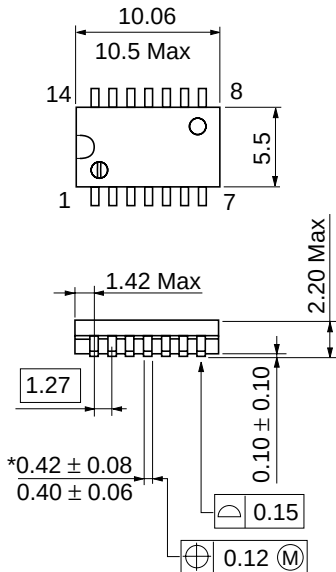
■SWITCHING CHARACTERISTICS ($V_{CC}=5V$, $T_a=25^{\circ}C$)

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

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

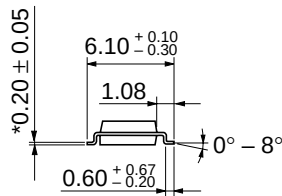
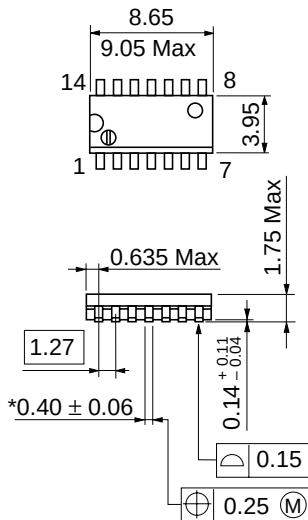


Hitachi Code	DP-14
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.97 g



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

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