To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

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Keep safety first in your circuit designs!

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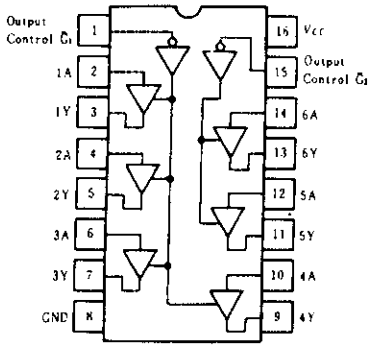
HD74LS367A ●Hex Bus Drivers (non-inverted data outputs with three-state outputs)

■PIN ARRANGEMENT



(Top View)

■ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Ratings	Unit
Supply voltage	V_{CC}	7.0	V
Input voltage	V_{IN}	7.0	V
Output voltage (off-state)	$V_{O(off)}$	5.5	V
Operating temperature range	T_{opr}	−20 ~ +75	°C
Storage temperature range	T_{stg}	−65 ~ +150	°C

■FUNCTION TABLE

$\bar{G}$	A	Y
H	X	Z
L	L	L
L	H	H

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
Output current	I_{OH}	—	—	−2.6	mA
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	V
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	V
			I_{OL}=12mA	—	—	0.4	
Output current	I_{OZ}	V_{CC}=5.25V, V_{IH}=2V, V_{IL}=0.8V	V_O=2.4V	—	—	20	μA
			V_O=0.4V	—	—	−20	
Input current	I_{IH}	V_{CC}=5.25V, V_I=2.7V		—	—	20	μA
	I_{IL}	A inputs V_{CC}=5.25V	V_I=0.5V, $\overline{G}$ inputs 2V	—	—	−20	μA
			V_I=0.4V, $\overline{G}$ inputs 0.4V	—	—	−0.4	mA
		$\overline{G}$ inputs 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		−40	—	−225	mA
Supply current**	I_{CC}	V_{CC}=5.25V		—	14	24	mA
Input clamp voltage	V_{IK}	V_{CC}=4.75V, I_{IN}=−18mA		—	—	−1.5	V

* V_{CC}=5V, Ta=25°C

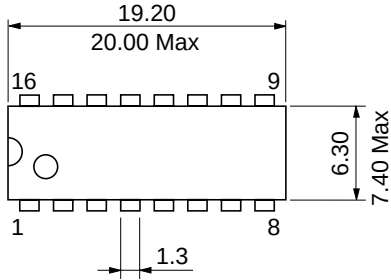
** I_{CC} is measured with data inputs grounded and output control inputs at 4.5V.

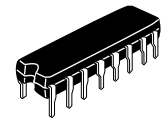
■SWITCHING CHARACTERISTICS (V_{CC}=5V, Ta=25°C)

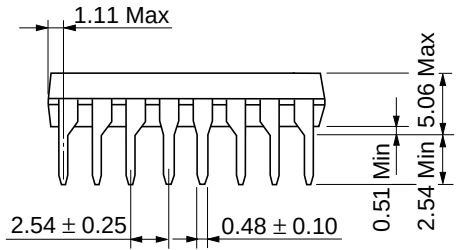
Item	Symbol	Test Conditions	min	typ	max	Unit
Propagation delay time	t_{PLH}	C_L=45pF, R_L=667Ω	—	10	16	ns
	t_{PHL}		—	9	22	
Output enable time	t_{ZH}		—	19	35	ns
	t_{ZL}		—	24	40	
Output disable time	t_{HZ}	C_L=5pF, R_L=667Ω	—	—	30	ns
	t_{LZ}		—	—	35	

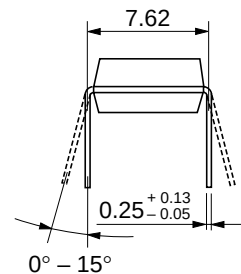
Note) Refer to Test Circuit and Waveform of the Common Item

Unit: mm



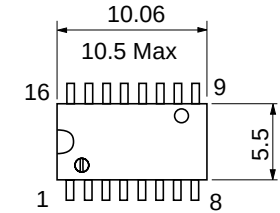


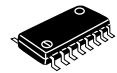


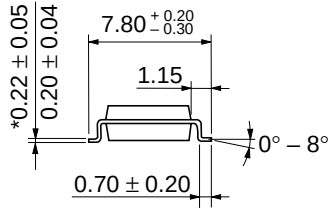


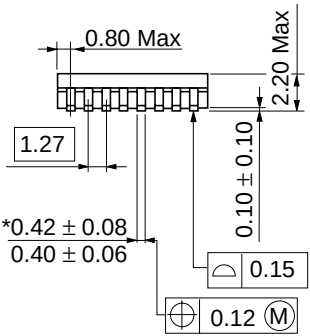
Hitachi Code	DP-16
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	1.07 g

Unit: mm





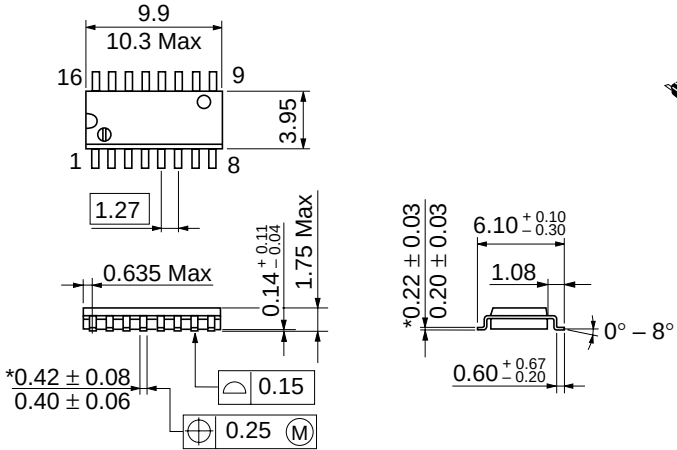




*Dimension including the plating thickness
Base material dimension

Hitachi Code	FP-16DA
JEDEC	—
EIAJ	Conforms
Weight (reference value)	0.24 g

Unit: mm



Hitachi Code	FP-16DN
JEDEC	Conforms
EIAJ	Conforms
Weight (reference value)	0.15 g

*Dimension including the plating thickness
Base material dimension

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