

HD74LS126A

Quadruple Bus Buffer Gates (with three-state outputs)

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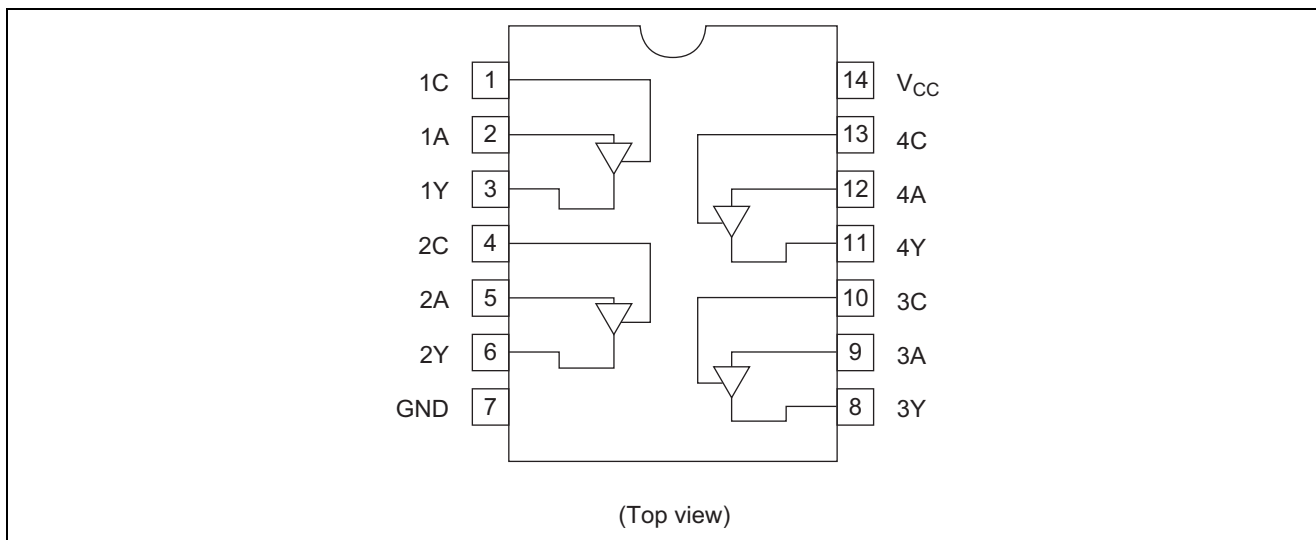
Features

- Ordering Information

Part Name	Package Type	Package Code (Previous Code)	Package Abbreviation	Taping Abbreviation (Quantity)
HD74LS126AFPEL	SOP-14 pin(JEITA)	PRSP0014DF-B (FP-14DAV)	FP	EL (2,000 pcs/reel)
HD74LS126ARPEL	SOP-14 pin(JEDEC)	PRSP0014DE-A (FP-14DNV)	RP	EL (2,500 pcs/reel)

Note: Please consult the sales office for the above package availability.

Pin Arrangement



Function Table

Inputs		Output
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

Absolute Maximum Ratings

Item	Symbol	Ratings	Unit
Supply voltage	V_{CC}	7	V
Input voltage	V_{IN}	7	V
Power dissipation	P_T	400	mW
Storage temperature	T_{stg}	-65 to +150	°C

Note: Voltage value, unless otherwise noted, are with respect to network ground terminal.

Recommended Operating Conditions

Item	Symbol	Min	Typ	Max	Unit
Supply voltage	V_{CC}	4.75	5.00	5.25	V
High level output current	I_{OH}	—	—	-2.6	mA
Low level output current	I_{OL}	—	—	24	mA
Operating temperature	T_{opr}	-20	25	75	°C

Electrical Characteristics

($T_a = -20$ to $+75$ °C)

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

Notes: * $V_{CC} = 5$ V, $T_a = 25$ °C

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

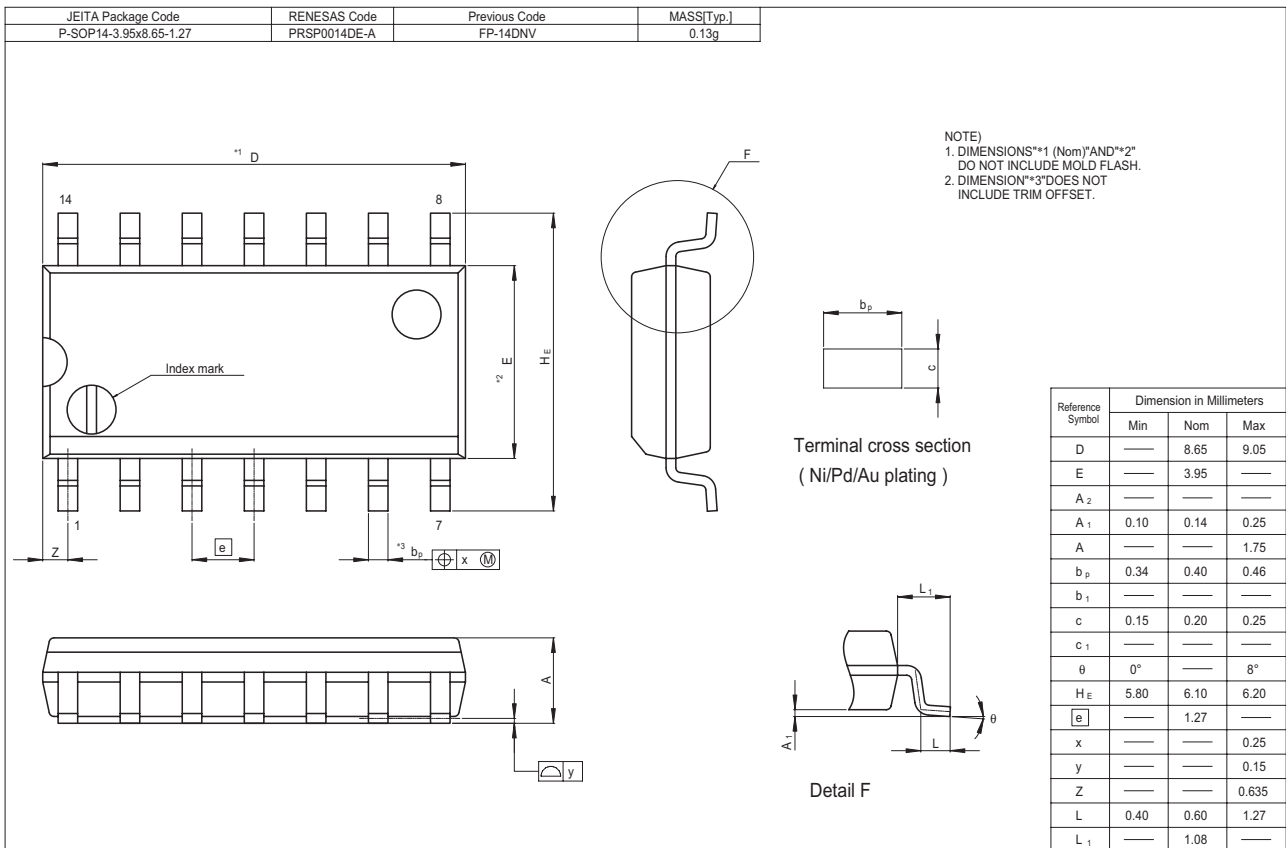
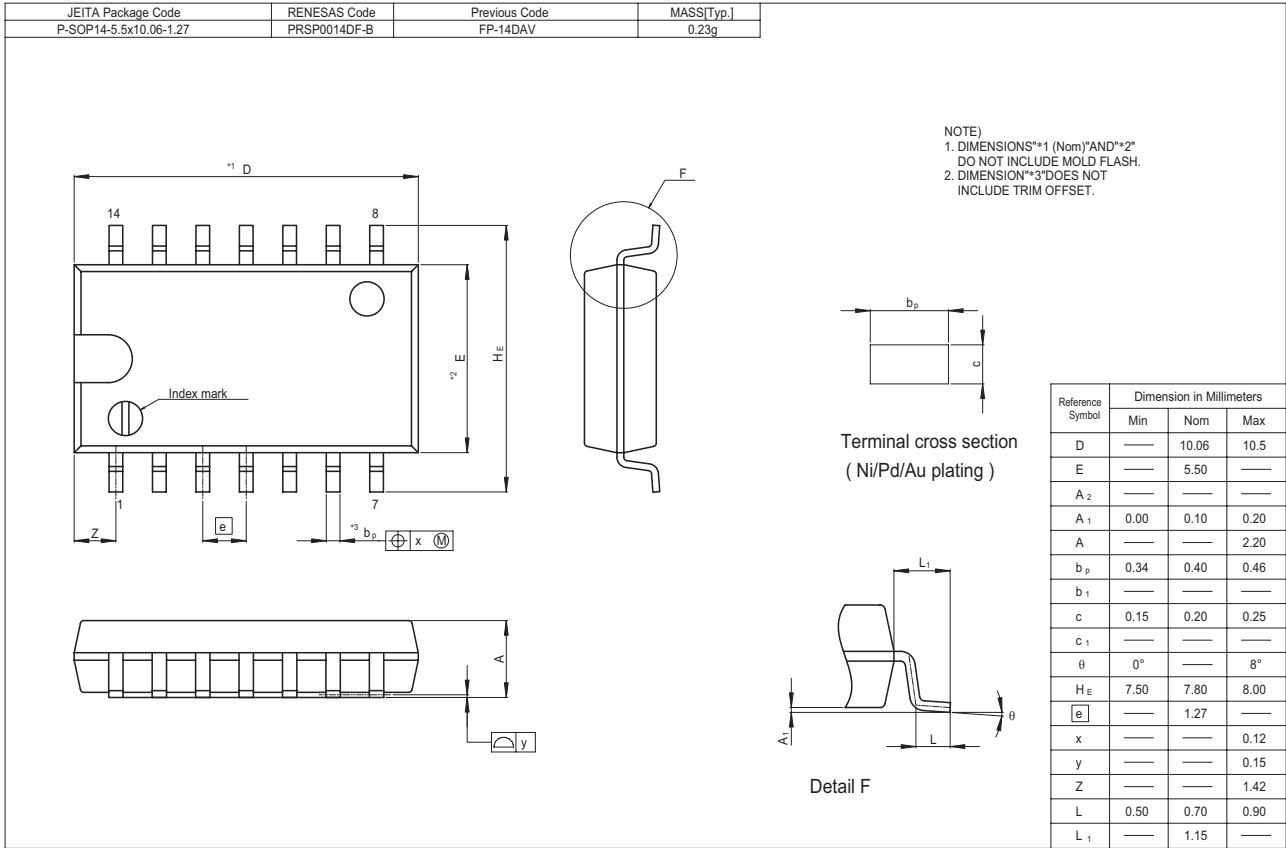
Switching Characteristics

($V_{CC} = 5$ V, $T_a = 25$ °C)

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

Note: Refer to Test Circuit and Waveform of the Common Item "TTL Common Matter (Document No.: REJ27D0005-0100)".

Package Dimensions



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