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# **HD74LS26**

# Quadruple 2-input High-voltage Interface Positive NAND Gates

REJ03D0402-0200 Rev.2.00 Feb.18.2005

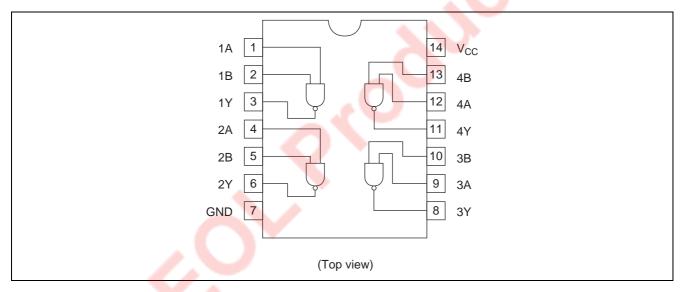
#### **Features**

• Ordering Information

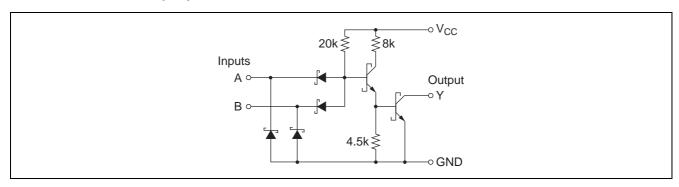
Part Name	Package Type	Package Code (Previous Code)	Package Abbreviation	Taping Abbreviation (Quantity)
HD74LS26P	DILP-14 pin	PRDP0014AB-B (DP-14AV)	Р	_
HD74LS26FPEL	SOP-14 pin (JEITA)	PRSP0014DF-B (FP-14DAV)	FP	EL (2,000 pcs/reel)

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

## **Pin Arrangement**



## Circuit Schematic (1/4)



#### **Absolute Maximum Ratings**

Item	Symbol	Ratings	Unit
Supply voltage	V <sub>CC</sub>	7	V
Input voltage	V <sub>IN</sub>	7	V
Power dissipation	P <sub>T</sub>	400	mW
Storage temperature	Tstg	-65 to +150	°C

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

### **Recommended Operating Conditions**

Item	Symbol	Min	Тур	Max	Unit
Supply voltage	V <sub>CC</sub>	4.75	5.00	5.25	V
Output voltage	$V_{OH}$	_	_	15	V
Output current	I <sub>OL</sub>	_	_	8	mA
Operating temperature	Topr	-20	25	75	°C

#### **Electrical Characteristics**

 $(Ta = -20 \text{ to } +75 \text{ }^{\circ}\text{C})$ 

Item	Symbol	min.	typ.*	max.	Unit	Condition
Input voltage	V <sub>IH</sub>	2.0	_	_	V	A 0
input voitage	V <sub>IL</sub>	_		0.8	V	
Output voltage	V <sub>OL</sub>	_		0.4	V	$I_{OL} = 4 \text{ mA}$ $V_{CC} = 4.75 \text{ V}, V_{IH} = 2 \text{ V}$
Output voltage	VOL	_		0.5		I <sub>OL</sub> = 8 mA
	I <sub>IH</sub>	_		20	μΑ	$V_{CC} = 5.25 \text{ V}, V_{I} = 2.7 \text{ V}$
Input current	$I_{1L}$	_		-0.4	mA	$V_{CC} = 5.25 \text{ V}, V_{I} = 0.4 \text{ V}$
	II	_		0.1	mA	$V_{CC} = 5.25 \text{ V}, V_{I} = 7 \text{ V}$
Output current	I <sub>OH</sub>	_	1	50	μΑ	$V_{OH} = 12 \text{ V}$ $V_{CC} = 4.75 \text{ V}, V_{IL} = 0.8 \text{ V}$
		_	1	1	mA	$V_{OH} = 15 \text{ V}$ VCC = 4.73 V, VIL = 0.8 V
Supply current	I <sub>CCH</sub>	_	0.8	1.6	mA	V <sub>CC</sub> = 5.25 V
	I <sub>CCL</sub>	_	2.4	4.4	mA	V <sub>CC</sub> = 5.25 V
Input clamp voltage	$V_{IK}$			-1.5	V	$V_{CC} = 4.75 \text{ V}, I_{IN} = -18 \text{ mA}$

Note:  $V_{CC} = 5 \text{ V}$ ,  $Ta = 25^{\circ}\text{C}$ 

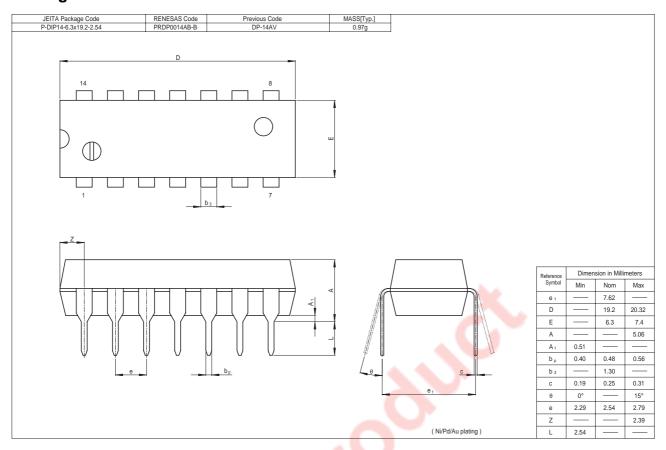
## Switching Characteristics

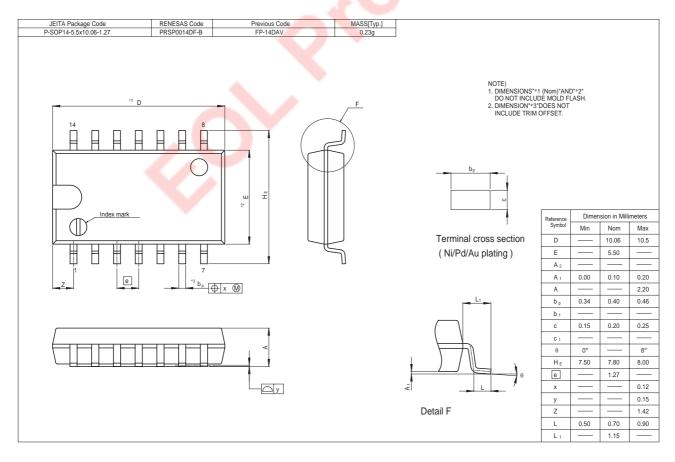
 $(V_{CC} = 5 \text{ V}, \text{ Ta} = 25^{\circ}\text{C})$ 

Item	Symbol	min.	typ.	max.	Unit	Condition
Dropogation delay time	t <sub>PLH</sub>	_	17	32	ns	C 15 pE B 2 kO
Propagation delay time	t <sub>PHL</sub>	_	15	28	ns	$C_L = 15 \text{ pF}, R_L = 2 \text{ k}\Omega$

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

#### **Package Dimensions**





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