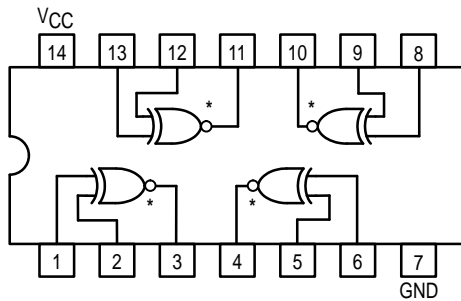




# QUAD 2-INPUT EXCLUSIVE NOR GATE

**SN54/74LS266**

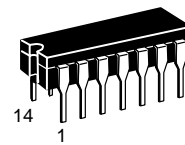
**QUAD 2-INPUT  
EXCLUSIVE NOR GATE  
LOW POWER SCHOTTKY**



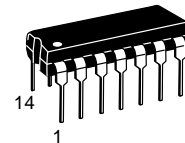
\* OPEN COLLECTOR OUTPUTS

**TRUTH TABLE**

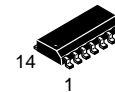
IN		OUT
A	B	Z
L	L	H
L	H	L
H	L	L
H	H	H



**J SUFFIX  
CERAMIC  
CASE 632-08**



**N SUFFIX  
PLASTIC  
CASE 646-06**



**D SUFFIX  
SOIC  
CASE 751A-02**

**ORDERING INFORMATION**

SN54LSXXXJ Ceramic  
SN74LSXXXN Plastic  
SN74LSXXXD SOIC

**GUARANTEED OPERATING RANGES**

Symbol	Parameter		Min	Typ	Max	Unit
V <sub>CC</sub>	Supply Voltage	54	4.5	5.0	5.5	V
		74	4.75	5.0	5.25	
T <sub>A</sub>	Operating Ambient Temperature Range	54	-55	25	125	°C
		74	0	25	70	
V <sub>OH</sub>	Output Voltage — High	54, 74			5.5	V
I <sub>OL</sub>	Output Current — Low	54			4.0	mA
		74			8.0	

# SN54/74LS266

## DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

Symbol	Parameter		Limits			Unit	Test Conditions
			Min	Typ	Max		
V <sub>IH</sub>	Input HIGH Voltage		2.0			V	Guaranteed Input HIGH Voltage for All Inputs
V <sub>IL</sub>	Input LOW Voltage	54		0.7	V	Guaranteed Input LOW Voltage for All Inputs	
		74		0.8			
V <sub>IK</sub>	Input Clamp Diode Voltage			-0.65	-1.5	V	V <sub>CC</sub> = MIN, I <sub>IN</sub> = -18 mA
V <sub>OH</sub>	Output HIGH Voltage	54, 74			100	μA	V <sub>CC</sub> = MIN, V <sub>OH</sub> = MAX
V <sub>OL</sub>	Output LOW Voltage	54, 74		0.25	0.4	V	I <sub>OL</sub> = 4.0 mA V <sub>CC</sub> = V <sub>CC</sub> MIN, V <sub>IN</sub> = V <sub>IL</sub> or V <sub>IH</sub> per Truth Table
		74		0.35	0.5	V	
I <sub>IH</sub>	Input HIGH Current				40	μA	V <sub>CC</sub> = MAX, V <sub>IN</sub> = 2.7 V
					0.2	mA	V <sub>CC</sub> = MAX, V <sub>IN</sub> = 7.0 V
I <sub>IL</sub>	Input LOW Current				-0.8	mA	V <sub>CC</sub> = MAX, V <sub>IN</sub> = 0.4 V
I <sub>CC</sub>	Power Supply Current				13	mA	V <sub>CC</sub> = MAX

## AC CHARACTERISTICS (T<sub>A</sub> = 25°C)

Symbol	Parameter		Limits			Unit	Test Conditions
			Min	Typ	Max		
t <sub>PLH</sub> t <sub>PHL</sub>	Propagation Delay, Other Input LOW			18 18	30 30	ns	V <sub>CC</sub> = 5.0 V C <sub>L</sub> = 15 pF, R <sub>L</sub> = 2.0 kΩ
t <sub>PLH</sub> t <sub>PHL</sub>	Propagation Delay, Other Input HIGH			18 18	30 30	ns	