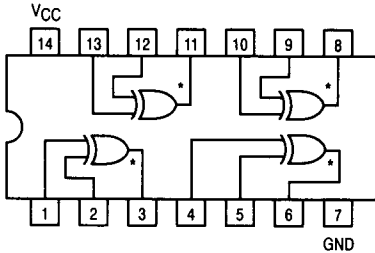




QUAD 2-INPUT EXCLUSIVE OR GATE



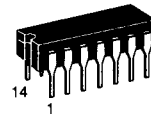
* OPEN COLLECTOR OUTPUTS

TRUTH TABLE

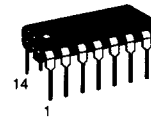
IN		OUT
A	B	Z
L	L	L
L	H	H
H	L	H
H	H	L

SN74LS136

QUAD 2-INPUT
EXCLUSIVE OR GATE
LOW POWER SCHOTTKY



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 _{CC}	Supply Voltage	4.75	5.0	5.25	V
T _A	Operating Ambient Temperature Range	0	25	70	°C
V _{OH}	Output Voltage — High			5.5	V
I _{OL}	Output Current — Low			8.0	mA

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DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

Symbol	Parameter	Limits			Unit	Test Conditions
		Min	Typ	Max		
V_{IH}	Input HIGH Voltage	2.0			V	Guaranteed Input HIGH Voltage for All Inputs
V_{IL}	Input LOW Voltage			0.8	V	Guaranteed Input LOW Voltage for All Inputs
V_{IK}	Input Clamp Diode Voltage		-0.65	-1.5	V	$V_{CC} = \text{MIN}$, $I_{IN} = -18 \text{ mA}$
I_{OH}	Output HIGH Current			100	μA	$V_{CC} = \text{MIN}$, $V_{OH} = \text{MAX}$
V_{OL}	Output LOW Voltage		0.25	0.4	V	$I_{OL} = 4.0 \text{ mA}$ $V_{CC} = V_{CC} \text{ MIN}$, $V_{IN} = V_{IL} \text{ or } V_{IH}$ per Truth Table
			0.35	0.5	V	
I_{IH}	Input HIGH Current			40	μA	$V_{CC} = \text{MAX}$, $V_{IN} = 2.7 \text{ V}$
				0.2	mA	$V_{CC} = \text{MAX}$, $V_{IN} = 7.0 \text{ V}$
I_{IL}	Input LOW Current			-0.8	mA	$V_{CC} = \text{MAX}$, $V_{IN} = 0.4 \text{ V}$
I_{CC}	Power Supply Current			10	mA	$V_{CC} = \text{MAX}$

AC CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Symbol	Parameter	Limits			Unit	Test Conditions
		Min	Typ	Max		
t_{PLH} t_{PHL}	Propagation Delay, Other Input LOW		18	30	ns	$V_{CC} = 5.0 \text{ V}$ $C_L = 15 \text{ pF}$, $R_L = 2.0 \text{ k}\Omega$
t_{PLH} t_{PHL}	Propagation Delay, Other Input HIGH		18	30	ns	