

Rochester Electronics Manufactured Components

Rochester branded components are manufactured using either die/wafers purchased from the original suppliers or Rochester wafers recreated from the original IP. All recreations are done with the approval of the OCM.

Parts are tested using original factory test programs or Rochester developed test solutions to guarantee product meets or exceed the OCM data sheet.

Quality Overview

- ISO-9001
- AS9120 certification
- Qualified Manufacturers List (QML) MIL-PRF-35835
 - Class Q Military
 - Class V Space Level
- Qualified Suppliers List of Distributors (QSLD)
- Rochester is a critical supplier to DLA and meets all industry and DLA standards.

Rochester Electronics, LLC is committed to supplying products that satisfy customer expectations for quality and are equal to those originally supplied by industry manufacturers.

The original manufacturer's datasheet accompanying this document reflects the performance and specifications of the Rochester manufactured version of this device. Rochester Electronics guarantees the performance of its semiconductor products to the original OEM specifications. 'Typical' values are for reference purposes only. Certain minimum or maximum ratings may be based on product characterization, design, simulation, or sample testing.

SN74LS02

 V_{CC}

QUAD 2-INPUT NOR GATE

GND



ON Semiconductor®

http://onsemi.com

QUAD 2-INPUT NOR GATE LOW POWER SCHOTTKY



J SUFFIX CERAMIC CASE 632-08



N SUFFIX PLASTIC CASE 646-06



D SUFFIX SOIC CASE 751A-02

ORDERING INFORMATION

SN54LSXXJ Ceramic SN74LSXXN Plastic SN74LSXXD SOIC

GUARANTEED OPERATING RANGES

Symbol	Parameter		Min	Тур	Max	Unit
V _{CC}	Supply Voltage	54 74	4.5 4.75	5.0 5.0	5.5 5.25	V
T _A	Operating Ambient Temperature Range	54 74	-55 0	25 25	125 70	°C
I _{OH}	Output Current — High	54, 74			-0.4	mA
I _{OL}	Output Current — Low	54 74			4.0 8.0	mA

SN74LS02

DC CHARACTERISTICS OVER OPERATING

TEMPERATURE RANGE (unless otherwise specified)

			Limits					
Symbol	Parameter		Min	Тур	Max	Unit	Test Conditions	
V _{IH}	Input HIGH Voltage		2.0			V	Guaranteed Input HIGH Voltage for All Inputs	
V _{IL}	Input LOW Voltage	54			0.7	٧	Guaranteed Input LOW Voltage for All Inputs	
		74			0.8			
V _{IK}	Input Clamp Diode Voltage			-0.65	-1.5	V	V _{CC} = MIN, I _{IN} = -18 mA	
V	Output HIGH Voltage	54	2.5	3.5		V	V_{CC} = MIN, I_{OH} = MAX, V_{IN} = V_{IH} or V_{IL} per Truth Table	
V _{OH}	Output High Voltage	74	2.7	3.5		V		
	Output LOW Voltage	54, 74		0.25	0.4	V	I _{OL} = 4.0 mA	V _{CC} = V _{CC} MIN,
V _{OL}		74		0.35	0.5	V	I _{OL} = 8.0 mA	$V_{IN} = V_{IL}$ or V_{IH} per Truth Table
	Input HIGH Current				20	μΑ	V _{CC} = MAX, V _{IN} =	2.7 V
I _{IH}					0.1	mA	V _{CC} = MAX, V _{IN} =	- 7.0 V
I _{IL}	Input LOW Current				-0.4	mA	$V_{CC} = MAX$, $V_{IN} = 0.4 V$	
Ios	Short Circuit Current (Note 1)		-20		-100	mA	V _{CC} = MAX	
Icc	Power Supply Current Total, Output HIGH				3.2	mA	V _{CC} = MAX	
	Total, Output LOW				5.4	×.c		

Note 1: Not more than one output should be shorted at a time, nor for more than 1 second.

AC CHARACTERISTICS (T_A = 25°C)

			Limits	/ C) \C	
Symbol	Parameter	Min	Тур	Max	Unit	Test Conditions
t _{PLH}	Turn-Off Delay, Input to Output		10	15	ns	V _{CC} = 5.0 V
t _{PHL}	Turn-On Delay, Input to Output	6	10	15	ns	C _L = 15 pF
	O RHIS DE CONTRE LE CONTRE	MA		•		

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