

PART NUMBER

74S22SC-ROCV

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 re-creations are done with the approval of the Original Component Manufacturer. (OCM)

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

Quality Overview

- ISO-9001
- AS9120 certification
- Qualified Manufacturers List (QML) MIL-PRF-38535
 - 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 OCM specifications. 'Typical' values are for reference purposes only. Certain minimum or maximum ratings may be based on product characterization, design, simulation, or sample testing.

✓ **54/7422** 011047
 ✓ **54H/74H22** 011051
 ✓ **54S/74S22** 011052
 ✓ **54LS/74LS22** 011050

DUAL 4-INPUT NAND GATE
(With Open-Collector Output)

ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE
		V _{CC} = +5.0 V $\pm 5\%$, T _A = 0°C to +70°C	V _{CC} = +5.0 V $\pm 10\%$, T _A = -55°C to +125°C	
Plastic DIP (P)	A	7422PC, 74H22PC 74S22PC, 74LS22PC		9A
Ceramic DIP (D)	A	7422DC, 74H22DC 74S22DC, 74LS22DC	5422DM, 54H22DM 54S22DM, 54LS22DM	6A
Flatpak (F)	A	7422FC, 74S22FC 74LS22FC	5422FM, 54S22FM 54LS22FM	3I
	B	74H22FC	54H22FM	

INPUT LOADING/FAN-OUT: See Section 3 for U.L. definitions

PINS	54/74 (U.L.) HIGH/LOW	54/74H (U.L.) HIGH/LOW	54/74S (U.L.) HIGH/LOW	54/74LS (U.L.) HIGH/LOW
Inputs	1.0/1.0	1.25/1.25	1.25/1.25	0.5/0.25
Outputs	OC**/10	OC**/12.5	OC**/12.5	OC**/5.0 (2.5)

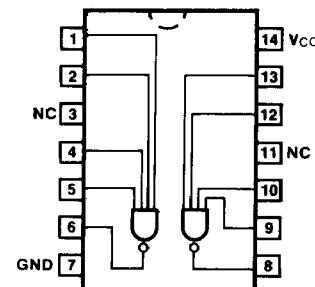
DC AND AC CHARACTERISTICS: See Section 3*

SYMBOL	PARAMETER	54/74	54/74H	54/74S	54/74LS	UNITS	CONDITIONS	
		Min	Max	Min	Max		Min	Max
I _{CCH}	Power Supply Current	4.0	5.0	6.6	0.8	mA	V _{IN} = Gnd	V _{CC} = Max
I _{CLL}	Current	11	20	18	2.2		V _{IN} = Open	
t _{PLH}	Propagation Delay	45	15	2.0	7.5	ns	Figs. 3-2, 3-4	
t _{PHL}		15	12	2.0	7.0			

*DC limits apply over operating temperature range; AC limits apply at T_A = +25°C and V_{CC} = +5.0 V.

**OC — Open Collector

CONNECTION DIAGRAMS
PINOUT A



PINOUT B

