Rochester Electronics

Datasheet

PART NUMBER

54H62JB-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.

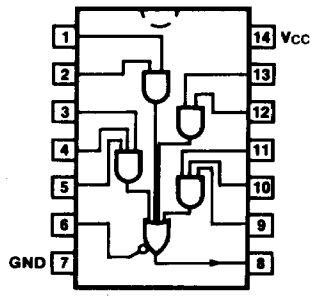
Rochester Electronics, LLC is committed to supplying products that satisfy customer expectations for quality and are equal to those originally supplied by industry manufacturers.

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.

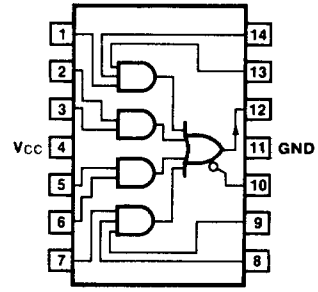
54H/74H62 011187

3-2-2-3-INPUT AND-OR EXPANDER

CONNECTION DIAGRAMS
PINOUT A



PINOUT B



ORDERING CODE: See Section 9

PKGS	PIN OUT	COMMERCIAL GRADE V_{CC} = +5.0 V ±5%, T_A = 0°C to +70°C	MILITARY GRADE V_{CC} = +5.0 V ±10%, T_A = -55°C to +125°C	PKG TYPE
Plastic DIP (P)	A	74H62PC		9A
Ceramic DIP (D)	A	74H62DC	54H62DM	6A
Flatpak (F)	B	74H62FC	54H62FM	3I

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

PINS	54/74H (U.L.) HIGH/LOW
Inputs	1.25/1.25
Outputs[1]	Note 2

DC CHARACTERISTICS OVER OPERATING TEMPERATURE RANGE (unless otherwise specified)

SYMBOL	PARAMETER	54/74H Min	54/74H Max	UNITS	CONDITIONS[3]	
V_{ON}	Output ON Voltage		0.4 0.4	V	T = -55°C, I_{ON} = 5.85 mA T_A = 0°C, I_{ON} = 6.3 mA	V_{CC} = Min, V_{IN} = 2.0 V, V_I = 1.0 V
V_{ON}	Output ON Voltage		0.4 0.4	V	T_A = +125°C, I_{ON} = 7.85 mA T_A = +70°C, I_{ON} = 7.4 mA	V_{CC} = Max, V_{IN} = 2.0 V, V_I = 0.6 V
I_{OFF}	Output OFF Current		320 570	µA	T_A = -55°C T_A = 0°C	V_{CC} = Min, V_{IN} = 0.8 V, V_I = 4.5 V, R = 575 Ω
I_{ON}	Output ON Current	-470 -600		µA	T_A = -55°C T_A = 0°C	V_{CC} = Min, V_{IN} = 2.0 V, V_I = 1.0 V
$I_{CC(ON)}$ $I_{CC(OFF)}$	Power Supply Current		7.0 9.0	mA	V_{IN} = Open V_{IN} = Gnd	V_{CC} = Max, V_I = 0.85 V

1. A maximum of one expander may be connected to one expandable AND-OR-Invert gate
2. Expander Outputs
3. V_I is applied to x output terminal during test

OUTPUT CAPACITANCE: V_{CC} and Ground Terminals Open

SYMBOL	PARAMETER	54/74H		UNITS	CONDITIONS
		Min	Max		
$C_{\overline{X}}$	Effective Capacitance of Output Transistor Q_1		1.3*	pF	f = 1.0 MHz, T_A = +25°C

*Typical Value