Rochester Electronics

Datasheet

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.

ABSOLUTE MAXIMUM RATINGS*

Ambient Temperature under Bias .....0°C to 70°C
Storage Temperature .....−65°C to +150°C
Voltage on any Pin with
Respect to Ground.....−1.0V to +7V
Power Dissipation 3W

NOTICE: This is a production data sheet. The specifications are subject to change without notice.

**WARNING: Stressing the device beyond the "Absolute Maximum Ratings" may cause permanent damage. These are stress ratings only. Operation beyond the "Operating Conditions" is not recommended and extended exposure beyond the "Operating Conditions" may affect device reliability.*

D.C. CHARACTERISTICS (T_A = 0°C to +70°C, V_{CC} = 5V ±10%)

Applicable to 8 MHz and 10 MHz devices.

Symbol	Parameter	Min	Max	Units	Test Conditions
V_{IL}	Input Low Voltage	−0.5	+0.8	V	
V_{IH}	Input High Voltage (All except X1 and $\overline{RES}$)	2.0	V_{CC} + 0.5	V	
V_{IH1}	Input High Voltage ($\overline{RES}$)	3.0	V_{CC} + 0.5	V	
V_{OL}	Output Low Voltage		0.45	V	I_a = 2.5 mA for $\overline{S0}$–$\overline{S2}$ I_a = 2.0 mA for all other Outputs
V_{OH}	Output High Voltage	2.4		V	I_{oa} = −400 μA
I_{CC}	Power Supply Current		600*	mA	T_A = −40°C
			550	mA	T_A = 0°C
			415	mA	T_A = +70°C
I_{LI}	Input Leakage Current		±10	μA	0V < V_{IN} < V_{CC}
I_{LO}	Output Leakage Current		±10	μA	0.45V < V_{OUT} < V_{CC}
V_{CLO}	Clock Output Low		0.6	V	I_a = 4.0 mA
V_{CHO}	Clock Output High	4.0		V	I_{oa} = −200 μA
V_{CLI}	Clock Input Low Voltage	−0.5	0.6	V	
V_{CHI}	Clock Input High Voltage	3.9	V_{CC} + 1.0	V	
C_{IN}	Input Capacitance		10	pF	
C_{IO}	I/O Capacitance		20	pF	

*For extended temperature parts only.