

# PART NUMBER 54H08FMB-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)

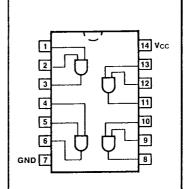
 Rochester is a critical supplier to DLA and meets all industry and DLA standards.

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.

# 54/7408 54H/74H08 545/74508 54LS/74LS08

QUAD 2-INPUT AND GATE

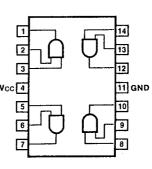


CONNECTION DIAGRAMS PINOUT A

**ORDERING CODE:** See Section 9

	PIN	COMMERCIAL GRADE	MILITARY GRADE	PKG TYPE	
PKGS	оит	$V_{CC} = +5.0 \text{ V } \pm 5\%,$ $T_A = 0^{\circ}\text{C to } +70^{\circ}\text{C}$	$V_{CC} = +5.0 \text{ V} \pm 10\%,$ $T_A = -55^{\circ} \text{ C} \text{ to } +125^{\circ} \text{ C}$		
Plastic DIP (P)	Α	7408PC, 74H08PC 74S08PC, 74LS08PC		9A	
Ceramic DIP (D)	А	7408DC, 74H08DC 74S08DC, 74LS08DC	5408DM, 54H08DM 54S08DM, 54LS08DM	6A	
Flatpak	А	7408FC, 74S08FC 74LS08FC	5408FM, 54S08FM 54LS08FM	31	
(F)	В	74H08FC	54H08FM		

#### PINOUT B



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

PINS	54/74 (U.L.)	<b>54/74H (U.L.)</b>	54/74S (U.L.)	54/74LS (U.L.)		
	HIGH/LOW	HIGH/LOW	HIGH/LOW	HIGH/LOW		
Inputs Outputs	1.0/1.0 20/10	1.25/1.25 12.5/12.5	1.25/1.25 25/12.5	0.5/0.25 10/5.0 (2.5)		

### DC AND AC CHARACTERISTICS: See Section 3\*

DADAMETER	54/74		54/74H		54/74S		54/74LS		UNITS	CONDITIONS	
FARAMETER	Min	Max	Min	Max	Min	Max	Min	Max			
Power Supply		21		40		32		4.8	mA	V <sub>IN</sub> = Open	
Current		33		64		57		8.8		V <sub>IN</sub> = Gnd	
Propagation Delay		27 19		12 12	2.5 2.5	7.0 7.5		13 11	ns	Fig. 3-1, 3-5	
	Current	PARAMETER Min Power Supply Current	PARAMETER Min Max Power Supply 21 Current 33	PARAMETER  Min Max Min  Power Supply  Current  33  Propagation Delay  27	PARAMETER           Min         Max         Min         Max           Power Supply         21         40           Current         33         64           Propagation Delay         27         12	PARAMETER           Min         Max         Min         Max         Min           Power Supply         21         40           Current         33         64           Propagation Delay         27         12         2.5	PARAMETER           Min         Max         Min         Max         Min         Max           Power Supply         21         40         32           Current         33         64         57           Propagation Delay         27         12         2.5         7.0	PARAMETER   Min   Max   Min	PARAMETER           Min         Max         Min         Max         Min         Max         Min         Max         Min         Max         Min         Max           Power Supply         21         40         32         4.8           Current         33         64         57         8.8           Propagation Delay         27         12         2.5         7.0         13	No.   Propagation Delay   PARAMETER   Min   Max   Min   Min   Max   Min   Max   Min   Max   Min   Max   Min   Ma	

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