

Quad 2-Input AND Gate

74AC08, 74ACT08

14 - 140808
 1

Description

Features

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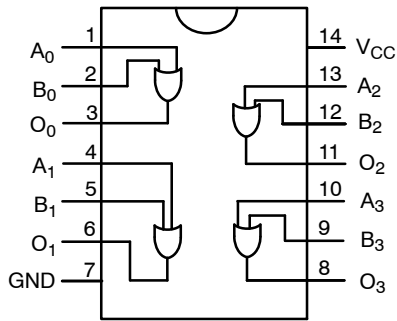


Figure 1. Connection Diagram

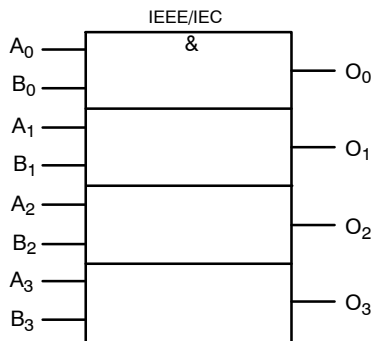


Figure 2. Logic Symbol

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ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Rating
V_{CC}	Supply Voltage	-0.5 V to +6.5 V
I_{IK}	DC Input Diode Current $V_I = -0.5$ V	-20 mA
	$V_I = V_{CC} + 0.5$	+20 mA
V_I	DC Input Voltage	

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DC ELECTRICAL CHARACTERISTICS FOR AC

Symbol	Parameter	V_{CC} (V)	Conditions	$T_A = +25^\circ\text{C}$		$T_A = -40^\circ\text{C to } +85^\circ\text{C}$		Units
				Typ	Guaranteed Limits			
V_{IH}	Minimum HIGH Level Input Voltage	3.0	$V_{OUT} = 0.1 \text{ V or } V_{CC} - 0.1 \text{ V}$	1.5	2.1	2.1		V

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DC ELECTRICAL CHARACTERISTICS FOR ACT

Symbol	Parameter	V_{CC} (V)	Conditions	$T_A = +25^\circ\text{C}$	$T_A = -40^\circ\text{C to } +85^\circ\text{C}$	Units

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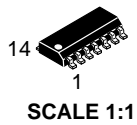
CAPATICANCE

Symbol	Parameter	Conditions	Typ	Units
C _{IN}	Input Capacitance	V _{CC} = OPEN	4.5	pF
C _{PD}	Power Dissipation Capacitance	V _{CC} = 5.0 V	20	pF

ORDERING INFORMATION

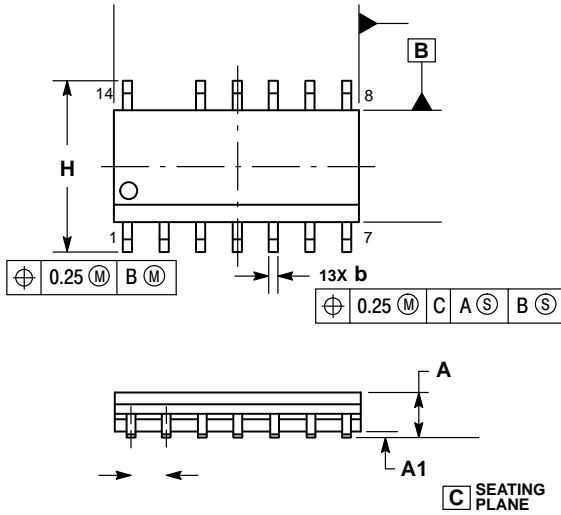
Order Number	Device Marking	Package	Shipping (Qty / Packing) [†]
74AC08MTCX	AC 08	TSSOP-14 WB (Pb-Free/Halogen Free)	2500 / Tape & Reel
74AC08SCX	AC08	SOIC-14 (Pb-Free/Halogen Free)	2500 / Tape & Reel
74ACT08MTC	ACT 08	TSSOP-14 WB (Pb-Free/Halogen Free)	96 / Tube
74ACT08MTCX	ACT 08	TSSOP-14 WB (Pb-Free/Halogen Free)	2500 / Tape & Reel
74ACT08SC	ACT08	SOIC-14 NB (Pb-Free/Halogen Free)	55 / Tube
74ACT08SCX	ACT08	SOIC-14 (Pb-Free/Halogen Free)	2500 / Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.



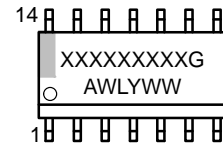
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- NOTES:
1. DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 1994.
 2. CONTROLLING DIMENSION: MILLIMETERS.
 3. DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE PROTRUSION SHALL BE 0.13 TOTAL IN EXCESS OF AT MAXIMUM MATERIAL CONDITION.
 4. DIMENSIONS D AND E DO NOT INCLUDE MOLD PROTRUSIONS.
 5. MAXIMUM MOLD PROTRUSION 0.15 PER SIDE.

GENERIC MARKING DIAGRAM*



- XXXXXX = Specific Device Code
A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week
G = Pb-Free Package

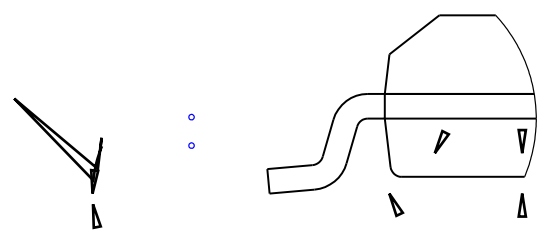
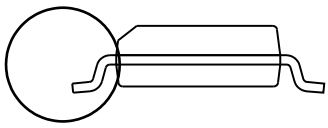
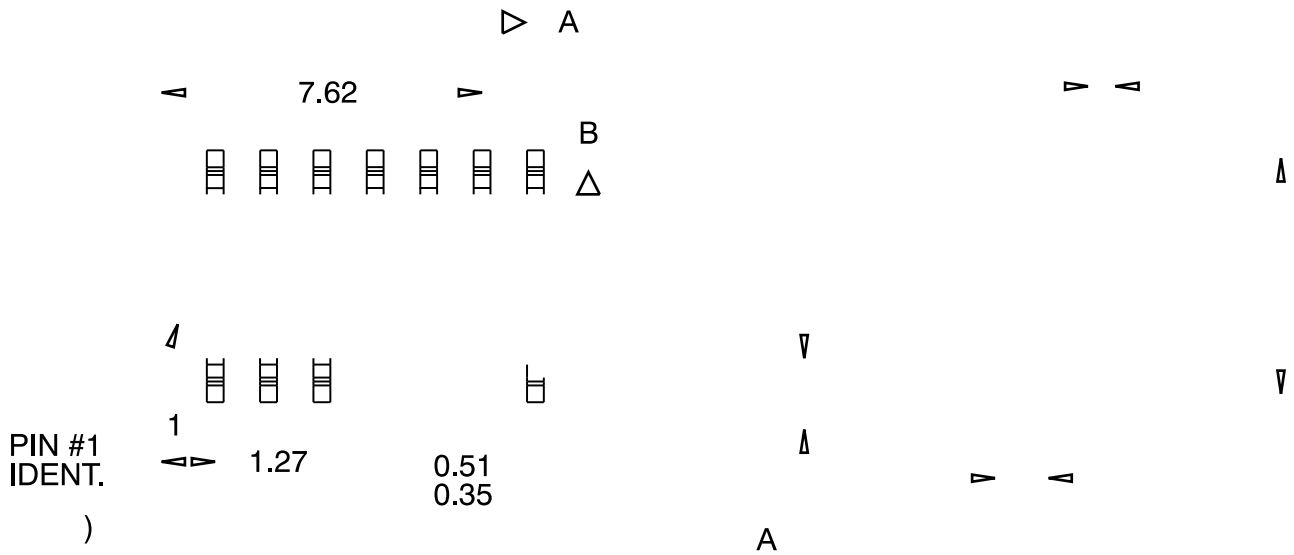
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STYLE 7:
PIN 1. ANODE/CATHODE
2. COMMON ANODE
3. COMMON CATHODE
4. ANODE/CATHODE
5. ANODE/CATHODE

SOIC14



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