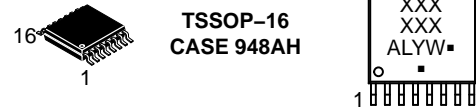


1- -8
74 138, 74 138

MARKING DIAGRAMS



XXX = Specific Device Code
A = Assembly Location
WL or L = Wafer Lot
Y = Year
WW or W = Work Week
G or ■ = Pb-Free Package
(Note: Microdot may be in either location)

General Description

The AC138/ACT138 is a high speed 1 of 8 decoder/demultiplexer. This device is ideally suited for high speed bipolar memory chip select address decoding. The multiple input enables allow parallel expansion to a 1 of 24 decoder using just three AC138/ACT138 devices or a 1 of 32 decoder using four AC138/ACT138 devices and one inverter

Features

- ICC Reduced by 50%
- Demultiplexing Capability
- Multiple Input Enable for Easy Expansion
- Active LOW Mutually Exclusive Outputs
- Outputs Source/Sink 24 mA
- ACT138 Has TTL Compatible Inputs
- These are Pb Free Devices

ORDERING INFORMATION

See detailed ordering and shipping information on page 8 of this data sheet.

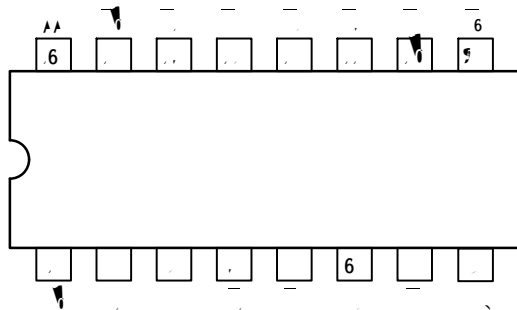


Figure 1. Pinout: 16-Lead Packages Conductors (Top View)

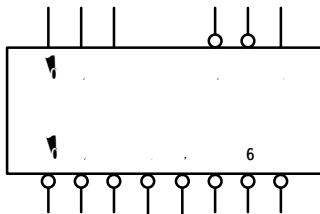


Figure 2. Logic Symbol

74AC138, 74ACT138

PIN DESCRIPTIONS

PIN	FUNCTION
A ₀ , A ₁	Address Inputs
E	Enable Inputs

E

74AC138, 74ACT138

ABSOLUTE MAXIMUM RATINGS

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

74AC138, 74ACT138

DC ELECTRICAL CHARACTERISTICS FOR AC

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C	T _A = -40°C to +85°C	Unit
				Typ	Guaranteed Limits	
V _{IH}						

74AC138, 74ACT138

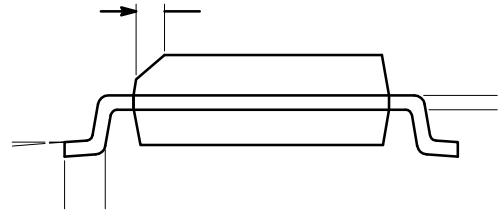
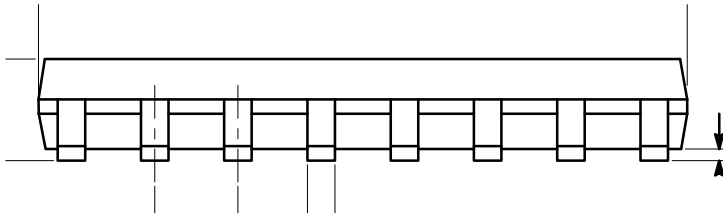
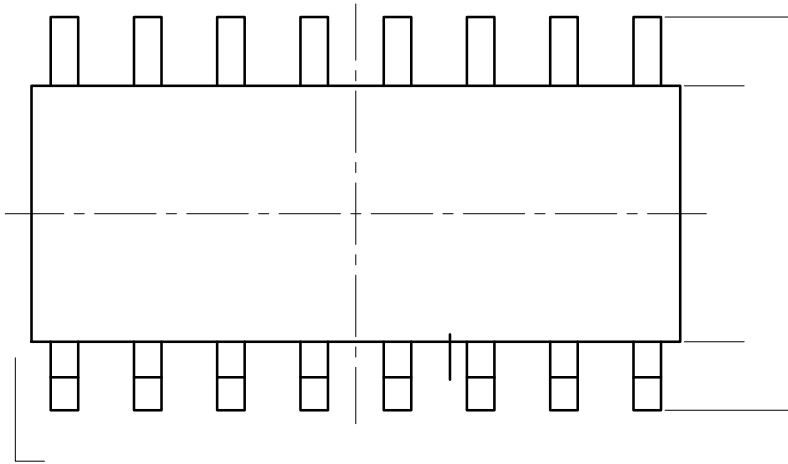
DC ELECTRICAL CHARACTERISTICS FOR ACT

Symbol	Parameter	V _{CC} (V)	Conditions	T _A = +25°C		T _A = -40°C to +85°C		Unit
				Typ	Guaranteed Limits			
V _{IH}	Minimum HIGH Level Input Voltage	4.5	V _{OUT} 0.1 V or V _{CC} 0.1 V	1.5	2.0	2.0		V
		5.5		1.5	2.0	2.0		
V _{IL}								

74AC138, 74ACT138

SOIC-16, 150 mils
CASE 751BG
ISSUE 0

DATE 19 DEC 2008



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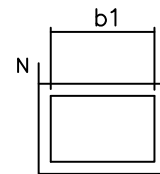
TSSOP 16
CASE 948AH
ISSUE O

DATE 19 SEP 2008



SEE DETAIL "A" 0.19
0.09

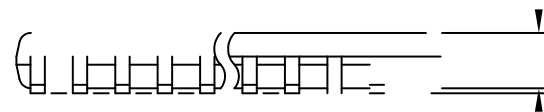
4.30



THIS TABLE FOR

S Y M B O L	MIN.		
A			
A ₁	0.05		
A ₂		J	0.95
b			0.30
b ₁			0.25
c			0.20
c ₁			0.16
D			
E ₁			4.50
C		0.65 BSC	
E		6.40 BSC	
L		0.60	0.70

SEE VARIATIONS
| ——— | 8°



SIDE VIEW

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