



# 74AC245, 74ACT245

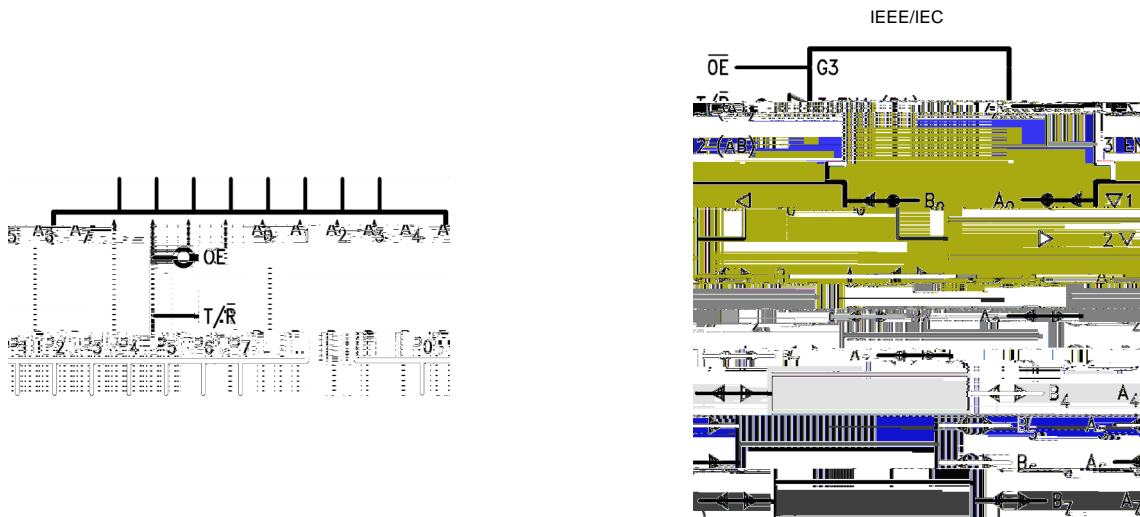


Figure 2. Logic Symbol

## PIN DESCRIPTIONS

Pin Name	Description
OE	Output Enable Input
T/R	Transmit / Receive Input
A <sub>0</sub> -A <sub>7</sub>	Side A 3-STATE Inputs or 3-STATE Outputs
B <sub>0</sub> -B <sub>7</sub>	Side B 3-STATE Inputs or 3-STATE Outputs

## TRUTH TABLE

Input		Output
OE	TR	
L	L	Bus B Data to Bus A
L	H	Bus A Data to Bus B
H	X	HIGH-Z State

H = HIGH Voltage Level  
 L = LOW Voltage Level  
 X = Immaterial

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Rating	Unit
V <sub>CC</sub>	Supply Voltage	-0.5 to +6.5	V
I <sub>IK</sub>	DC Input Diode Current V <sub>I</sub> = -0.5 V	-20	mA
	V <sub>I</sub> = V <sub>CC</sub> + 0.5	+20	mA
V <sub>I</sub>	DC Input Voltage	-0.5 to V <sub>CC</sub> + 0.5	V
I <sub>OK</sub>	DC Output Diode Current V <sub>O</sub> = -0.5 V	-20	mA
	V <sub>O</sub> = V <sub>CC</sub> + 0.5 V	+20	mA
V <sub>O</sub>	DC Output Voltage	-0.5 to V <sub>CC</sub> + 0.5	V
I <sub>O</sub>	DC Output Source or Sink Current	±50	mA
I <sub>CC</sub> or I <sub>GND</sub>	DC V <sub>CC</sub> or Ground Current per Output Pin	±50	mA
T <sub>STG</sub>	Storage Temperature	-65 to +150	°C
T <sub>J</sub>	Junction Temperature	140	°C

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.





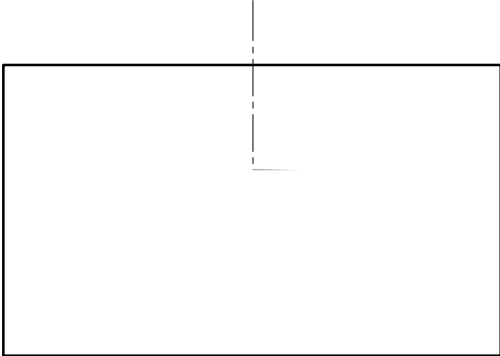
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## AC ELECTRICAL CHARACTERISTICS FOR ACT

Symbol	Parameter	V <sub>CC</sub> (V) Note 7)	T <sub>A</sub> = +25°C C <sub>L</sub> = 50 pF			T <sub>A</sub> = -40°C to +85°C C <sub>L</sub> = 50 pF		Unit
			Min.	Typ.	Max.	Min.	Max.	
t <sub>PLH</sub>	Propagation Delay, A <sub>n</sub> to B <sub>n</sub> or B <sub>n</sub> to A <sub>n</sub>	5.0 or B						

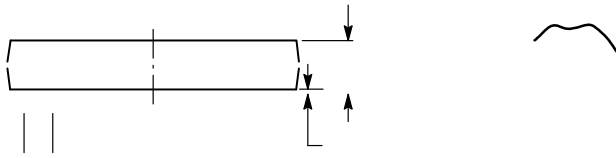
**SOIC-20, 300 mils**  
CASE 751BJ  
ISSUE O

DATE 19 DEC 2008



SOIC-20 WB  
CASE 751D-05  
ISSUE H

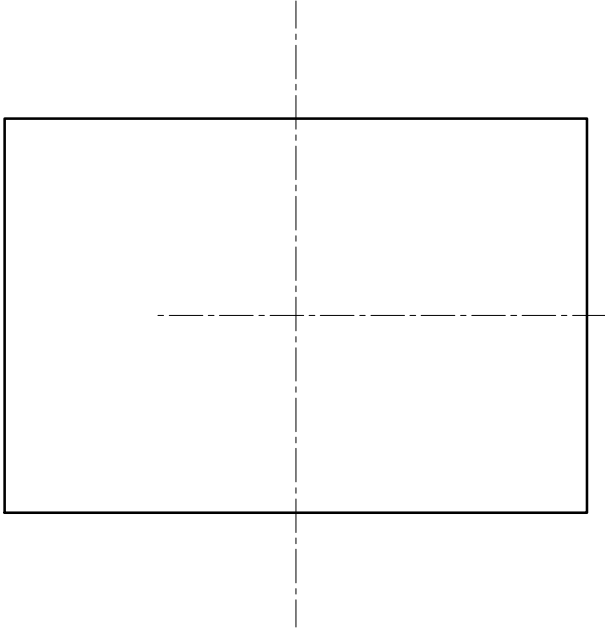
DATE 22 APR 2015



TSSOP-20 WB



TSSOP20, 4.4x6.5



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