



January 1995
Revised May 1999

74F2240 Octal Buffer/Line Driver with 25Ω Series Resistors in the Outputs

General Description

The 74F2240 is an inverting octal buffer and line driver designed to drive capacitive inputs of MOS memory devices, address and clock lines or act as a low undershoot general purpose bus driver.

The 25Ω series resistor in the outputs reduces undershoot and ringing and eliminates the need for external resistors.

Features

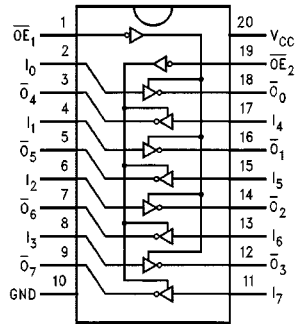
- 3-STATE outputs drive bus lines or buffer memory address registers
- Outputs sink 12 mA and source 15 mA
- 25Ω series resistors in outputs eliminate the need for external resistors
- Designed to drive the capacitive inputs of MOS devices
- Guaranteed 4000V minimum ESD protection

Ordering Code:

Order Number	Package Number	Package Description
74F2240SC	M20B	20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300 Wide
74F2240QC	V20A	20-Lead Plastic Lead Chip Carrier (PLCC), JEDEC MO-047, 0.350 Square

Devices also available in Tape and Reel. Specify by appending the suffix letter "X" to the ordering code.

Connection Diagram



Truth Table

\overline{OE}_1	D_{1n}	O_{1n}	\overline{OE}_2	D_{2n}	O_{2n}
H	X	Z	H	X	Z
L	H	L	L	H	L
L	L	H	L	L	H

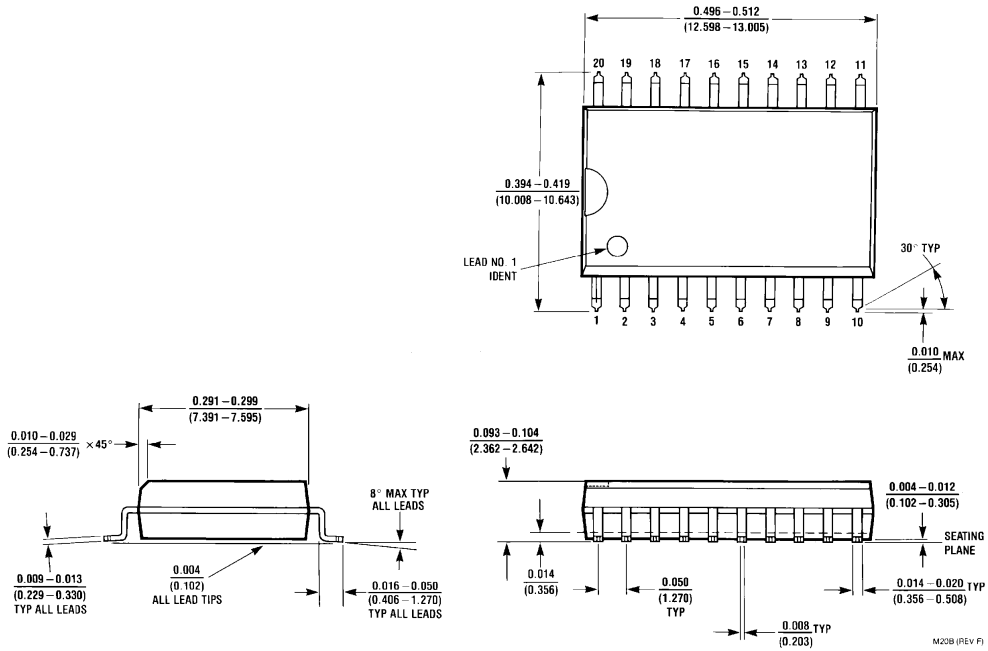
Unit Loading/Fan Out

Pin Names	Description	U.L. HIGH/LOW	Output I_{OH}/I_{OL}
$\overline{OE}_1, \overline{OE}_2$	3-STATE Output Enable Input (Active LOW)	1.0/1.667	20 μA/-1 mA
$I_0 - I_7$	Inputs	1.0/1.667	20 μA/-1 mA
$\overline{O}_0 - \overline{O}_7$	Outputs	750/20	-15 mA/12 mA

AC Electrical Characteristics							
Symbol	Parameter	T _A = +25°C V _{CC} = +5.0V C _L = 50 pF			T _A = 0°C to +70°C V _{CC} = +5.0V C _L = 50 pF		Units
		Min	Typ	Max	Min	Max	
t _{PLH}	Propagation Delay	3.0	4.9	7.5	3.0	7.5	ns
t _{PHL}	Data to Output	2.0	3.7	6.0	2.0	6.0	
t _{PZH}	Output Enable Time	2.0	3.9	6.5	2.0	7.0	ns
t _{PZL}		4.0	6.7	9.5	4.0	10.0	
t _{PHZ}	Output Disable Time	2.0	4.1	6.5	2.0	7.0	ns
t _{PLZ}		2.0	4.9	8.5	2.0	9.5	

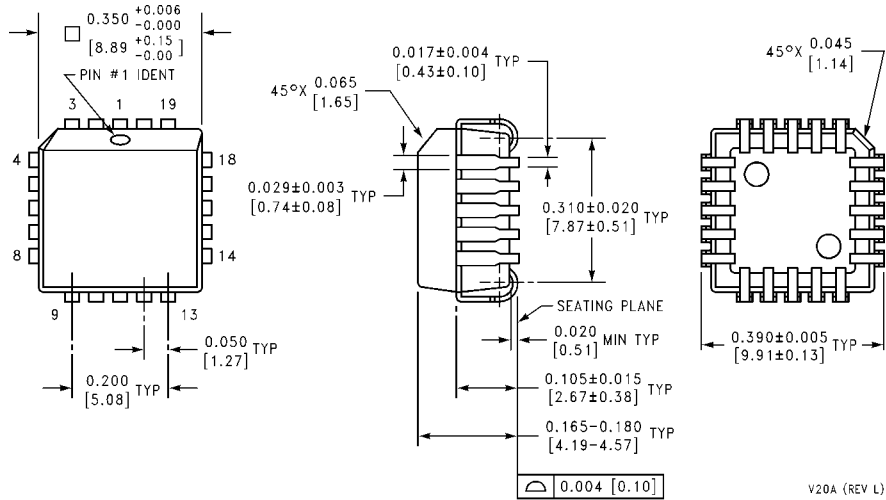
74F2240

Physical Dimensions inches (millimeters) unless otherwise noted



**20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300 Wide
Package Number M20B**

Physical Dimensions inches (millimeters) unless otherwise noted (Continued)



**20-Lead Plastic Lead Chip Carrier (PLCC), JEDEC MO-047, 0.350 Square
Package Number V20A**

V20A (REV L)

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