

1. General Description

The EM74AHC1G125 and EM74AHCT1G125 are single buffer/line drivers with 3-state outputs. Inputs are overvoltage tolerant. This feature allows the use of these devices as translators in mixed voltage environments.

2. Features and Benefits

- Wide supply voltage range from 2.0 V to 5.5 V
- Overvoltage tolerant inputs to 5.5 V
- High noise immunity
- CMOS low power dissipation
- Latch-up performance exceeds 200 mA
- Symmetrical output impedance
- Balanced propagation delays
- Input levels:
 - For EM74AHC1G125: CMOS level
 - For EM74AHCT1G125: TTL level
- ESD protection:
 - HBM ANSI/ESDA/JEDEC JS-001 Class 3A exceeds 7000 V
 - CDM ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 2000 V
- Multiple package options

EM74AHC1G125; EM74AHCT1G125

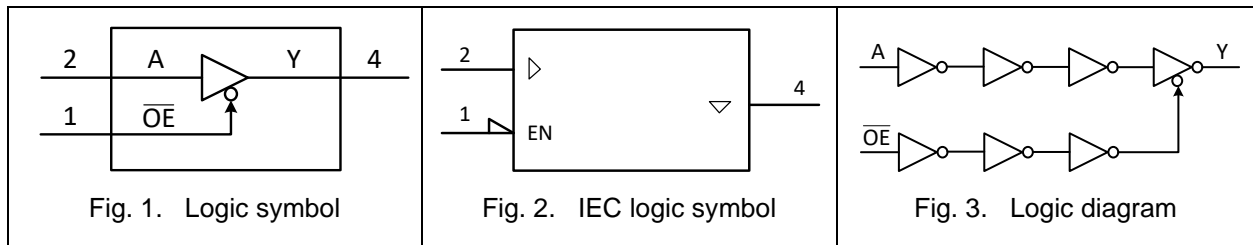
Bus buffer/line driver; 3-state

3. Ordering Information

Table 1. Ordering information

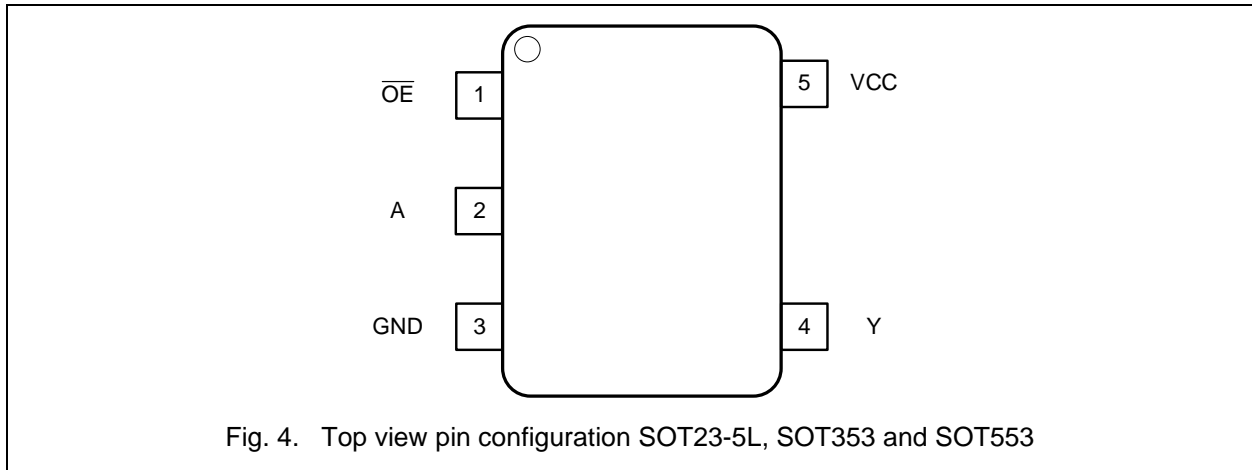
Type number	Topside marking	Package		
		Name	Description	Quantity
EM74AHC1G125GV	APYW	SOT23-5L	SOT23 package, 5 pins 2.92 mm × 1.6 mm; 1.25 mm (Max) height	3000
EM74AHCT1G125GV	CPYW			
EM74AHC1G125GW	APYW	SOT353	SOT353 package, 5 pins 2.1 mm × 1.25 mm; 1.1 mm (Max) height	3000
EM74AHCT1G125GW	CPYW			
EM74AHC1G125DRL	APYW	SOT553	SOT553 package, 5 pins 1.6 mm × 1.2 mm; 0.6 mm (Max) height	3000
EM74AHCT1G125DRL	CPYW			

4. Function Diagram



5. Pinning Information

5.1. Pinning



5.2. Pin description

Table 2. Pin description

Symbol	Pin	Description
\overline{OE}	1	Output enable input
A	2	Data input
GND	3	Ground (0V)
Y	4	Data output
V _{cc}	5	Supply voltage

6. Functional Description

Table 3. Function table

H = HIGH voltage level; L = LOW voltage level; X = don't care; Z = high-impedance OFF-state

Input		Output
\overline{OE}	A	Y
L	L	L
L	H	H
H	X	Z