

1. General Description

EM74AHC1G06 and EM74AHCT1G06 are single inverters with open-drain outputs. Inputs are overvoltage tolerant. This feature allows the use of these devices as translators in mixed voltage environments.

The AHC device has CMOS input switching levels and supply voltage range 2 V to 5.5 V.

The AHCT device has TTL input switching levels and supply voltage range 4.5 V to 5.5 V.

2. Features and Benefits

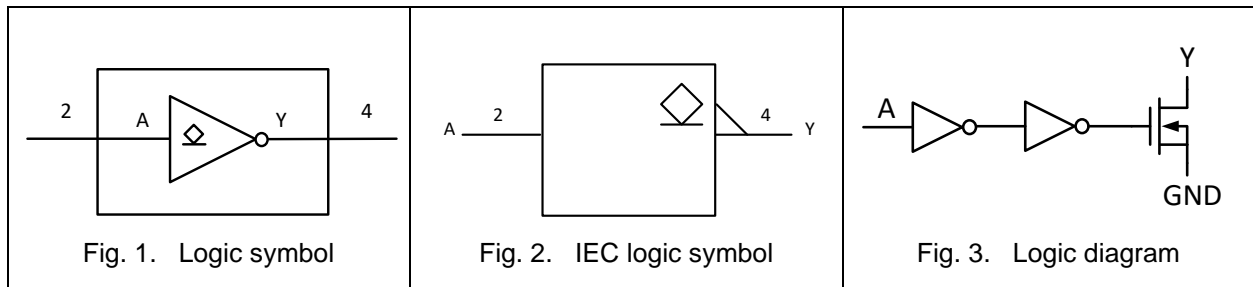
- Wide supply voltage range from 2.0 V to 5.5 V
- Overvoltage tolerant inputs to 5.5 V
- High noise immunity
- CMOS low power dissipation
- Latch-up performance exceeds 200 mA
- Input levels:
 - For EM74AHC1G06: CMOS level
 - For EM74AHCT1G06: TTL level
- ESD protection:
 - HBM ANSI/ESDA/JEDEC JS-001 Class 3A exceeds 7000 V
 - CDM ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 2000 V
- Multiple package options

3. Ordering Information

Table 1. Ordering information

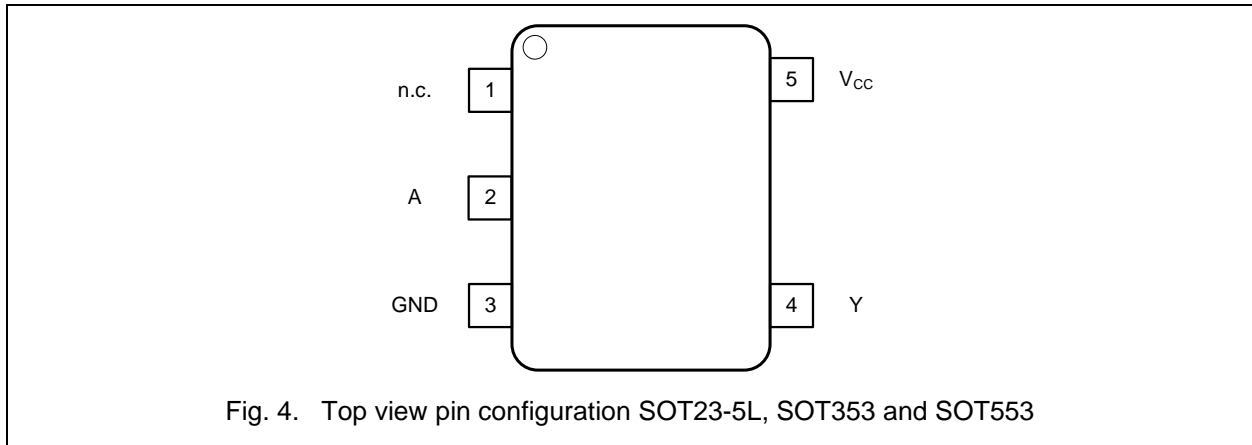
Type number	Topside marking	Package		
		Name	Description	Quantity
EM74AHC1G06GV	A4YW	SOT23-5L	SOT23 package, 5 pins 2.92 mm × 1.6 mm; 1.25 mm (Max) height	3000
EM74AHCT1G06GV	C4YW			
EM74AHC1G06GW	A4YW	SOT353	SOT353 package, 5 pins 2.1 mm × 1.25 mm; 1.1 mm (Max) height	3000
EM74AHCT1G06GW	C4YW			
EM74AHC1G06DRL	A4YW	SOT553	SOT553 package, 5 pins 1.6 mm × 1.2 mm; 0.6 mm (Max) height	3000
EM74AHCT1G06DRL	C4YW			

4. Function Diagram



5. Pinning Information

5.1. Pinning



5.2. Pin description

Table 2. Pin description

Symbol	Pin	Description
n.c.	1	Not connected
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; Z = high-impedance OFF-state.

Input	Output
A	Y
L	Z
H	L