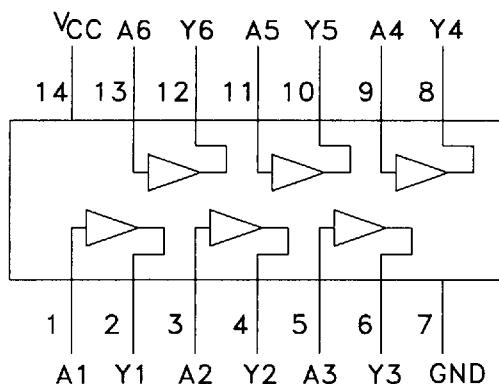
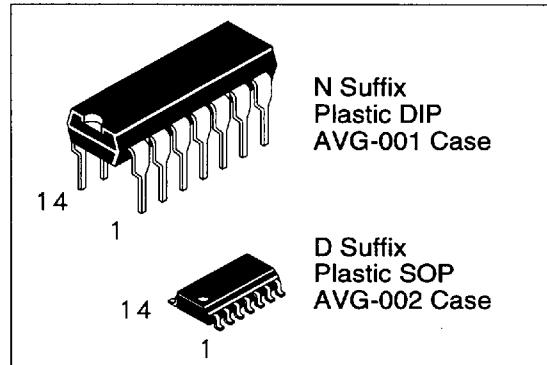


## Hex Non-Inverting Drivers with Open Collector Outputs

DV74ALS1035

This device contains six independent drivers, each of which performs the logic identity function. The Outputs require external pull-up resistors for proper logical operations.

- AVG's ALS has guaranteed DC and AC specification over full temperature and Vcc range
- Switching specifications for ALS at 50 pF
- AVG's ALS has the lowest speed power product (4pJ per gate typical) of all logic series
- Higher speed and 24mA Output Drive
- 24mA Low Level Output Drive



**TRUTH TABLE**  
Y=A

Inputs	Outputs
A	Y
L	L
H	H

H = High Level Logic  
L = Low Level Logic

### ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	ALS1035	Unit
V <sub>CC</sub>	Supply Voltage	7.0	V
V <sub>IN</sub>	Input Voltage	7.0	V
T <sub>STG</sub>	Storage Temperature Range	-65 to +150	°C

### GUARANTEED OPERATING CONDITIONS

Symbol	Parameter	ALS1035		Unit
		Min	Max	
V <sub>CC</sub>	Supply Voltage	4.5	5.5	V
V <sub>IH</sub>	High Level Input Voltage	2.0		V
V <sub>IL</sub>	Low Level Input Voltage		0.8	V
V <sub>OH</sub>	High Level Output Voltage		5.5	V
I <sub>OL</sub>	Low Level Output Current		24	mA
T <sub>A</sub>	Ambient Temperature Range	-10 to +70		°C

**DC ELECTRICAL CHARACTERISTICS** over full operating conditions

Symbol	Parameter	Conditions	ALS1035			Unit
			Min	Typ	Max	
$V_{IK}$	Input Clamp Voltage	$V_{CC} = \text{min}$ , $I_{IN} = -18 \text{ mA}$			-1.5	V
$I_{OH}$	Output HIGH Current	$V_{CC} = \text{min}$ , $V_{OH} = 5.5 \text{ V}$			100	$\mu\text{A}$
$V_{OL}$	Low Level Output Voltage	$V_{CC} = \text{min}$	$I_{OL} = 12.0 \text{ mA}$	0.25	0.4	V
			$I_{OL} = 24.0 \text{ mA}$	0.35	0.5	V
$I_{IH}$	High Level Input Current	$V_{CC} = \text{max}$ , $V_N = 2.7 \text{ V}$			20	$\mu\text{A}$
		$V_{CC} = \text{max}$ , $V_{IN} = 7.0 \text{ V}$			0.1	mA
$I_{IL}$	Low Level Input Current	$V_{CC} = \text{max}$ , $V_{IN} = 0.4 \text{ V}$			-0.1	mA
$I_{CC}$	Supply Current $V_{CC} = \text{max}$	Total, Output HIGH Total, Output LOW		3 8	6 14	mA mA

**SWITCHING CHARACTERISTICS** over full operating conditions

Symbol	Parameter	ALS1035		Unit
		Min	Max	
$t_{PLH}$	Turn Off Delay, Input to Output	5	30	ns
$t_{PHL}$	Turn On Delay, Input to Output	2	12	ns

**SWITCHING WAVEFORMS**