



# LB1256

## Printer Driver

### Overview

The LB1256 is a 7-unit driver array, possessing high-current, low-saturating outputs. It has a motor driver circuit equipped with a brake circuit. It is suited for low-voltage, high-current driver use.

### Features

- Has a large current capacity (400mA) and low saturation voltage (0.5V max).
- Has a motor driver with a spark suppressor.
- Ideal for various battery-operated preprinter drivers.

### Specifications

#### Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC\ max}$		-0.3 to +7.0	V
Maximum supply voltage	$V_{OUT}$		-0.3 to +10.0	V
Input supply voltage	$V_{IN}$		-0.3 to +7.0	V
Maximum output current	$I_{OUT}$	Per unit : pulse width<35ms	400	mA
Maximum forward current	$I_{FSM}$	Spark suppressor diode, pulse width≤35ms, 5% duty	700	mA
GND pin flow-out current	$I_{GND}$	Pulse width<35ms	3000	mA
Instantaneous current drain	$I_{CCP}$	Pulse width<35ms, 5% duty	700	mA
Allowable power dissipation	$P_d\ max$	$T_a=55^\circ\text{C}$	700	mW
Operating temperature	$T_{opr}$		-20 to +75	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +125	$^\circ\text{C}$

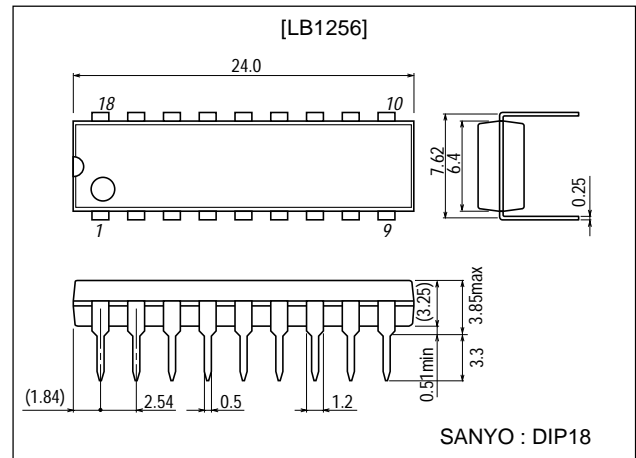
#### Allowable Operating Ranges at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	$V_{CC}$		2.0 to 6.0	V
Input H-level voltage	$V_{IH}$	$I_{OUT}=150\text{mA}$	2.0 to 7.0	V
Input L-level voltage	$V_{IL}$	$I_{OUT}=100\mu\text{A}$	-0.3 to +0.7	V

### Package Dimensions

unit:mm

3007B-DIP18



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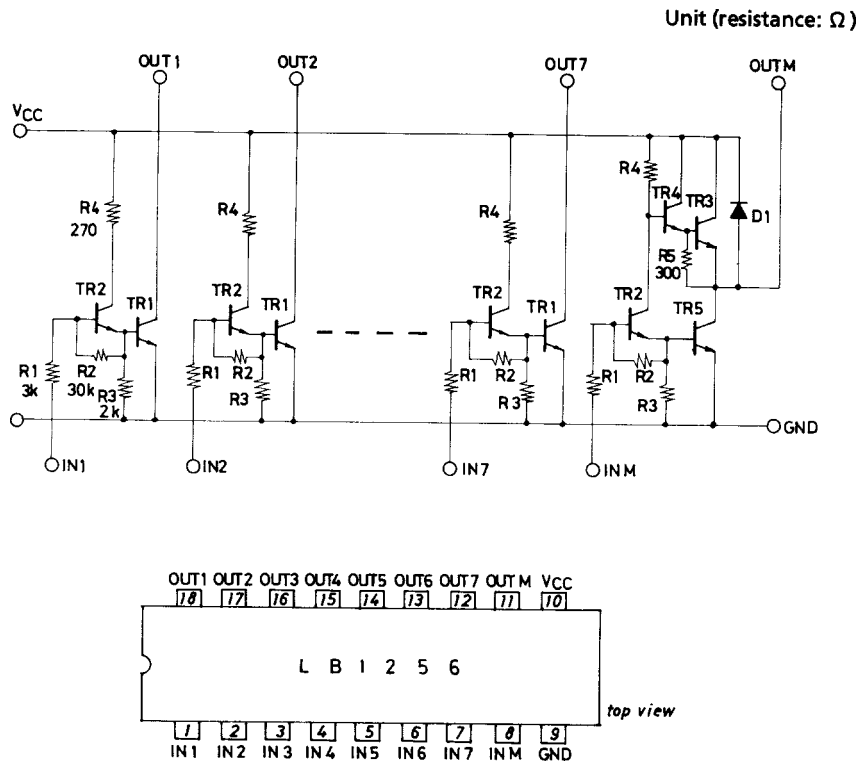
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## Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V <sub>OUT1</sub>	V <sub>IN</sub> =2.0V, V <sub>CC</sub> =2.0V, I <sub>OUT</sub> =150mA			0.3	V
	V <sub>OUT2</sub>	V <sub>IN</sub> =3.0V, V <sub>CC</sub> =3.5V, I <sub>OUT</sub> =200mA			0.25	V
	V <sub>OUT3</sub>	V <sub>IN</sub> =5.5V, V <sub>CC</sub> =6.0V, I <sub>OUT</sub> =400mA			0.50	V
Output sustain voltage	V <sub>Osus</sub>	V <sub>IN</sub> : open, I <sub>OUT</sub> =400mA, <10μs	10			V
Output leakage current	I <sub>off</sub>	V <sub>IN</sub> =0.7V, V <sub>CC</sub> =6V			100	μA
Input current	I <sub>IN</sub>	V <sub>IN</sub> =6.0V, I <sub>OUT</sub> =0			2.5	mA
Spark suppressor diode forward voltage	V <sub>F(S)</sub>	I <sub>F(S)</sub> =400mA			3.0	V

## Equivalent Circuit and Pin Assignment



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