

**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 printer drivers.

Specifications

Absolute Maximum Ratings at Ta = 25°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	Pd max	Ta=55°C	700	mW
Operating temperature	T _{opr}		-20 to +75	°C
Storage temperature	T _{stg}		-40 to +125	°C

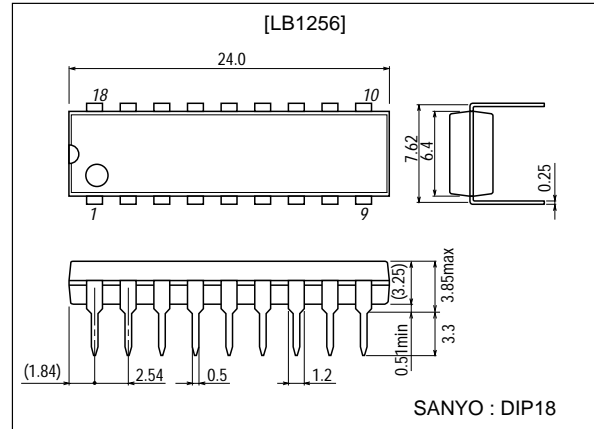
Allowable Operating Ranges at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	V _{CC}		2.0 to 6.0	V
Input H-level voltage	V _{IH}	I _{OUT} =150mA	2.0 to 7.0	V
Input L-level voltage	V _{IL}	I _{OUT} =100μA	-0.3 to +0.7	V

Package Dimensions

unit:mm

3007B-DIP18



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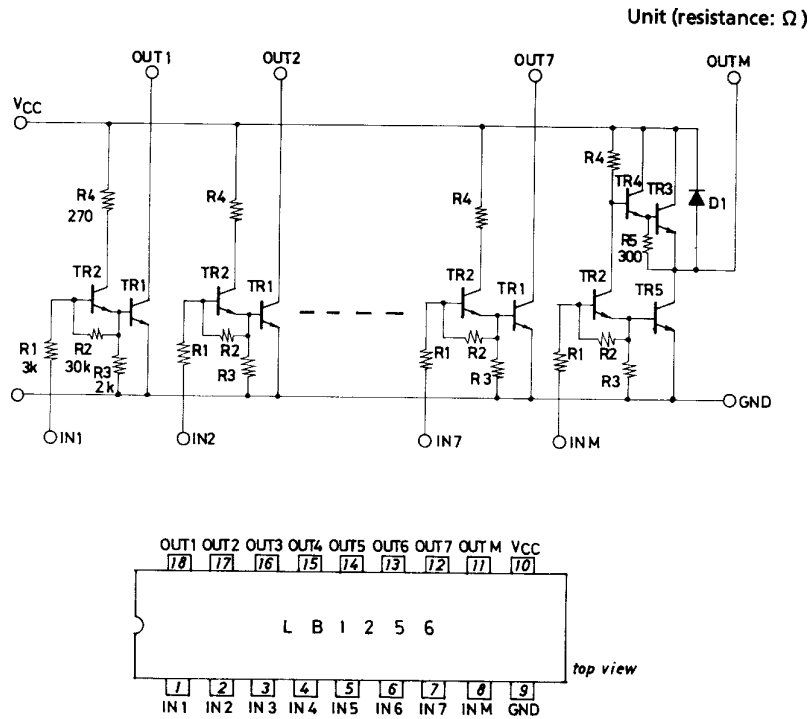
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LB1256

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V_{OUT1}	$V_{IN}=2.0\text{V}, V_{CC}=2.0\text{V}, I_{OUT}=150\text{mA}$			0.3	V
	V_{OUT2}	$V_{IN}=3.0\text{V}, V_{CC}=3.5\text{V}, I_{OUT}=200\text{mA}$			0.25	V
	V_{OUT3}	$V_{IN}=5.5\text{V}, V_{CC}=6.0\text{V}, I_{OUT}=400\text{mA}$			0.50	V
Output sustain voltage	V_{Osus}	V_{IN} : open, $I_{OUT}=400\text{mA}, <10\mu\text{s}$	10			V
Output leakage current	I_{off}	$V_{IN}=0.7\text{V}, V_{CC}=6\text{V}$			100	μA
Input current	I_{IN}	$V_{IN}=6.0\text{V}, I_{OUT}=0$			2.5	mA
Spark suppressor diode forward voltage	$V_{F(S)}$	$I_{F(S)}=400\text{mA}$			3.0	V

Equivalent Circuit and Pin Assignment



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