Monolithic Digital IC



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.

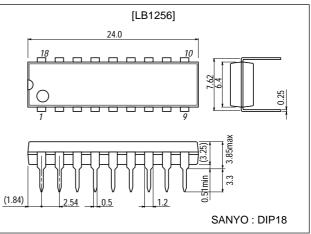
Features

- 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 preinter drivers.

Package Dimensions

unit:mm

3007B-DIP18



Specifications

Absolute Maximum Ratings at $Ta = 25^{\circ}C$

5				
Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	V _{CC} max		-0.3 to +7.0	V
Maximum supply voltage	VOUT		-0.3 to +10.0	V
Input supply voltage	VIN		-0.3 to +7.0	V
Maximum output current	IOUT	Per unit : pulse width<35ms	400	mA
Maximum forward current	IFSM	Spark suppressor diode, pulse width≤35ms, 5% duty	700	mA
GND pin flow-out current	IGND	Pulse width<35ms	3000	mA
Instantaneous current drain	ICCP	Pulse width<35ms, 5% duty	700	mA
Allowable power dissipation	Pd max	Ta=55°C	700	mW
Operating temperature	Topr		-20 to +75	°C
Storage temperature	Tstg		-40 to +125	°C

Allowable Operating Ranges at $Ta = 25^{\circ}C$

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

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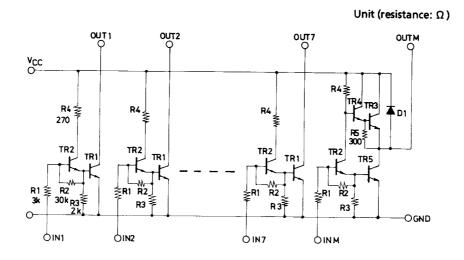
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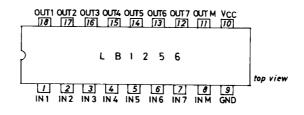
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Electrical Characteristics at $Ta = 25^{\circ}C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Output voltage	VOUT1	V _{IN} =2.0V, V _{CC} =2.0V, I _{OUT} =150mA			0.3	V
	VOUT2	V _{IN} =3.0V, V _{CC} =3.5V, I _{OUT} =200mA			0.25	V
	V _{OUT3}	V _{IN} =5.5V, V _{CC} =6.0V, I _{OUT} =400mA			0.50	V
Output sustain voltage	V _{Osus}	V _{IN} : open, I _{OUT} =400mA, <10µs	10			V
Output leakage current	loff	V _{IN} =0.7V, V _{CC} =6V			100	μA
Input current	IIN	V _{IN} =6.0V, I _{OUT} =0			2.5	mA
Spark suppressor diode forward voltage	V _{F(S)}	I _{F(S)} =400mA			3.0	V

Equivalent Circuit and Pin Assignment





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