Ordering number:ENN886D

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.

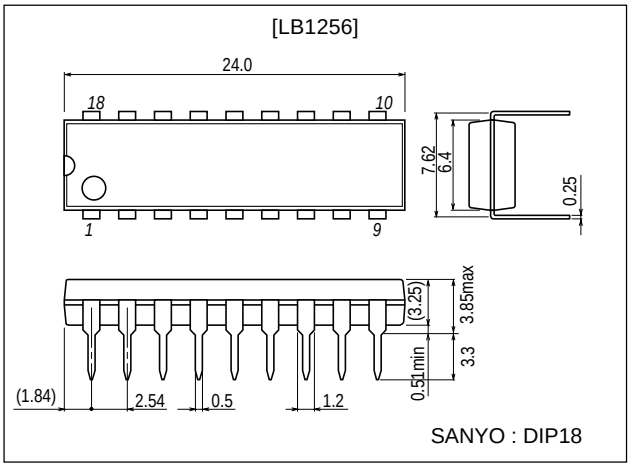
Features

- 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˚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	Topr		–20 to +75	˚C
Storage temperature	Tstg		–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

Electrical Characteristics at Ta = 25˚C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V_{OUT1}	V_{IN}=2.0V, V_{CC}=2.0V, I_{OUT}=150mA			0.3	V
	V_{OUT2}	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	I_{off}	V_{IN}=0.7V, V_{CC}=6V			100	μA
Input current	I_{IN}	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

Unit (resistance: Ω)