Ordering number:ENN1366D

Monolithic Digital IC

LB1246

Active-Low Input Printer Driver

Overview

The LB1246 is a 7-channel driver array with large current, low saturation output and contains a motor driver with brake circuit. It is suited for use in low active input, low voltage, large current driver applications.

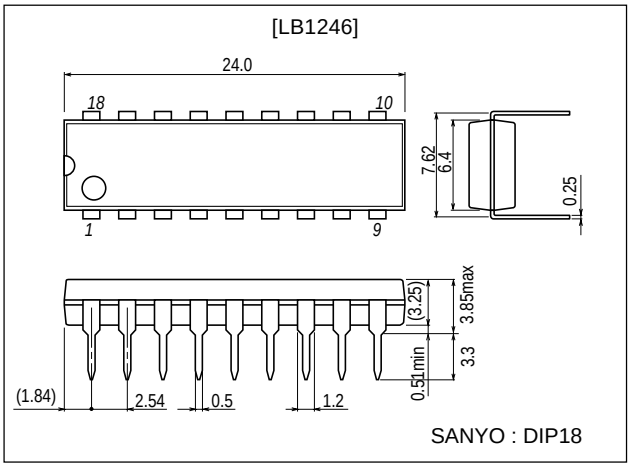
Features

- Low active input type.
- Large current capacity (400mA) and low saturation output voltage (0.5V max at 400mA).
- Motor driver with spark killer.
- Input protecting diode.
- Especially suited for battery-operated printer drivers of various types.

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
Output supply voltage	V_{OUT}		–0.3 to +10	V
Input supply voltage	V_{IN}	GND≤V_{IN}	V_{CC}–7.0 to V_{CC}+15	V
Output current	I_{OUT}	Per unit	400	mA
Spark killer diode forward current	I_{FSM}	Pulse width≤35ms, duty 5%	400	mA
GND pin current	I_{GND}	Pulse width≤35ms	3200	mA
Instantaneous current drain	I_{CCP}	Pulse width≤35ms, duty 5%	400	mA
Allowable power dissipation	Pd max		1130	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}		2.3 to 6.0	V
Input H-level voltage	V_{IH}	GND≤V_{IN}, I_{OUT}=200mA	V_{CC}–6.0 to V_{CC}–2.3	V
Input L-level voltage	V_{IL}	I_{OUT}≤100µA	V_{CC}–0.7 t_o V_{CC}+15	V

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Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V_{OUT1}	V_{CC}=2.3V, V_{IN}=V_{CC}–2.3V, I_{OUT}=200mA			0.4	V
	V_{OUT2}	V_{CC}=3.5V, V_{IN}=V_{CC}–3.0V, I_{OUT}=200mA			0.25	V
	V_{OUT3}	V_{CC}=6.0V, V_{IN}=V_{CC}–5.5V, I_{OUT}=400mA			0.25	V
Output sustain voltage	$V_{O(SUS)}$	I_{OUT}=400mA	10			V
Input current	I_{IN}	V_{CC}=6.0V, V_{IN}=V_{CC},–6.0V	–1.0			mA
Supply leakage current	$I_{CC(OFF)}$	V_{IN}=V_{CC}=6.0V			20	μA
Output leakage current	I_{OFF}	V_{OUT}=V_{CC}=6.0V, V_{IN}=V_{CC}=–0.7V			100	μA
Spark killer diode forward voltage	$V_{F(S)}$	$I_{F(S)}$=400mA			3.0	V

Equivalent Circuit

Unit (resistance: Ω)