

# SANYO

NO.1366D

**LB1246**

## Active-Low Input Printer Driver

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.

### Absolute Maximum Ratings at Ta=25°C

Absolute Maximum Ratings at Ta = 25°C				unit
Maximum Supply Voltage	V <sub>CC</sub> max		−0.3 to +7.0	V
Output Supply Voltage	V <sub>OUT</sub>		−0.3 to +10	V
Input Supply Voltage	V <sub>IN</sub>	GND ≤ V <sub>IN</sub>	V <sub>CC</sub> − 7.0 to V <sub>CC</sub> + 15	V
Output Current	I <sub>OUT</sub>	Per unit	400	mA
Spark Killer Diode Forward Current	I <sub>FSM</sub>	Pulse width ≤ 35ms duty 5%	400	mA
GND Pin Current	I <sub>GND</sub>	Pulse width ≤ 35ms	3200	mA
Instantaneous Current	I <sub>CCP</sub>	Pulse width ≤ 35ms duty 5%	400	mA
Dissipation				
Allowable Power Dissipation	P <sub>d</sub> max		1130	mW
Operating Temperature	T <sub>opr</sub>		−20 to +75	°C
Storage Temperature	T <sub>stg</sub>		−40 to +125	°C

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

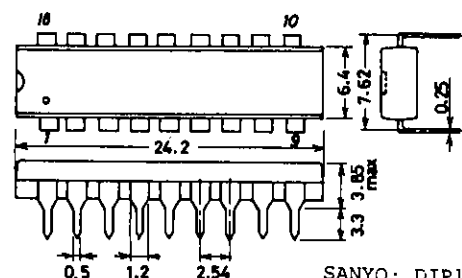
Allowable Operating Conditions at Ta=25°C				unit
Supply Voltage	V <sub>CC</sub>		2.3 to 6.0	V
Input "H"-level Voltage	V <sub>IH</sub>	GND ≤ V <sub>IN</sub> , I <sub>OUT</sub> = 200mA	V <sub>CC</sub> - 6.0 to V <sub>CC</sub> - 2.3	V
Input "L"-level Voltage	V <sub>IL</sub>	I <sub>OUT</sub> ≤ 100μA	V <sub>CC</sub> - 0.7 to V <sub>CC</sub> + 15	V

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

Electrical Characteristics at Ta=25°C			min	typ	max	unit
Output Voltage	V <sub>OUT1</sub>	V <sub>CC</sub> =2.3V, V <sub>IN</sub> =V <sub>CC</sub> -2.3V, I <sub>OUT</sub> =200mA			0.4	V
	V <sub>OUT2</sub>	V <sub>CC</sub> =3.5V, V <sub>IN</sub> =V <sub>CC</sub> -3.0V, I <sub>OUT</sub> =200mA			0.25	V
	V <sub>OUT3</sub>	V <sub>CC</sub> =6.0V, V <sub>IN</sub> =V <sub>CC</sub> -5.5V, I <sub>OUT</sub> =400mA			0.25	V

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### Package Dimensions 3007A-D18IC (unit : mm)



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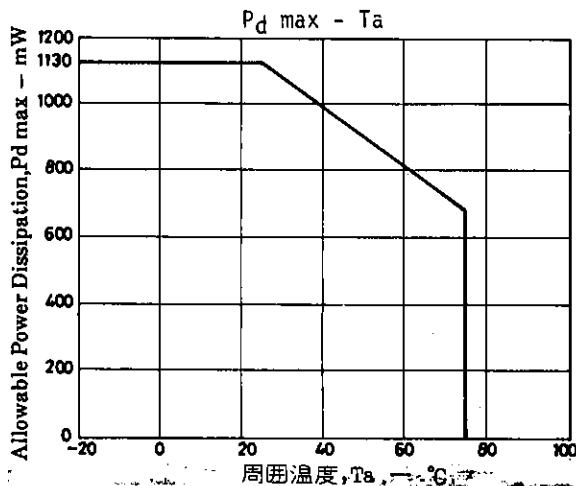
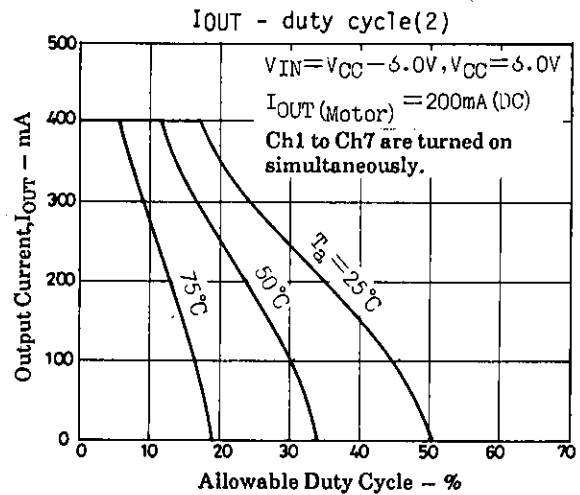
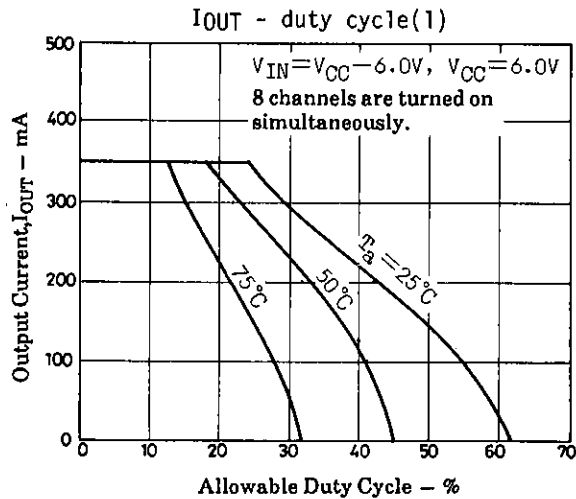
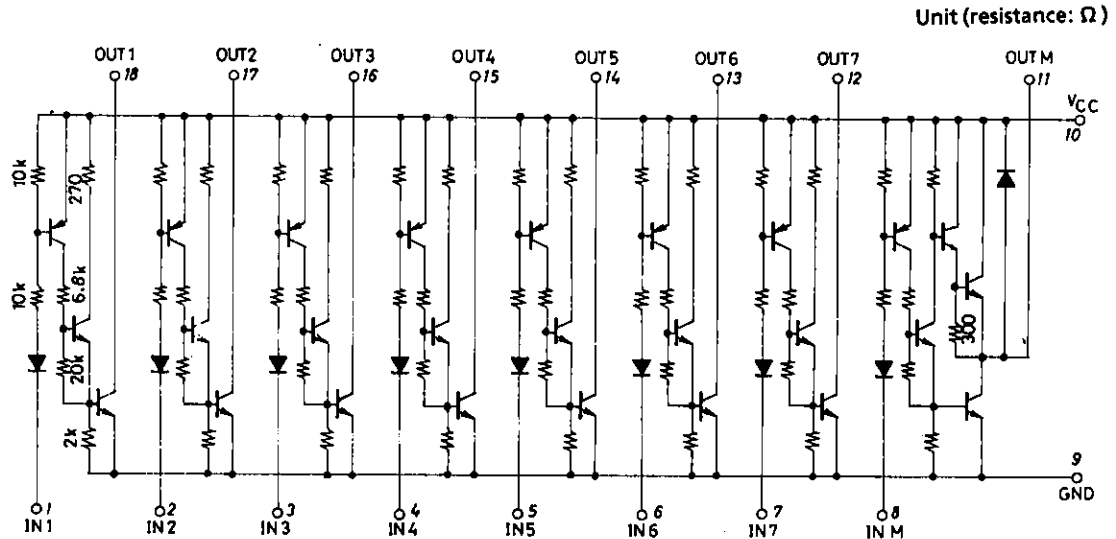
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O3095YK/7049YT/7067KI/N224MW/9143KI, TS No.1366-1/3

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			min	typ	max	unit
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	$\mu A$
Output Leakage Current	$I_{OFF}$	$V_{OUT}=V_{CC}=6.0V, V_{IN}=V_{CC}-0.7V$			100	$\mu A$
Spark Killer Diode	$V_{F(S)}$	$I_{F(S)}=400mA$			3.0	V
Forward Voltage						

## Equivalent Circuit



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