

<b>SANYO</b>	NO.1366D	Monolithic Digital IC
		LB1246
<b>Active-Low Input Printer Driver</b>		

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**

				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
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 Ta = 25°C**

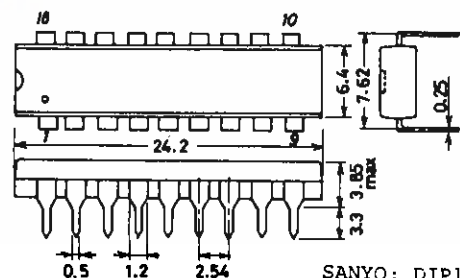
				unit
Supply Voltage	V <sub>CC</sub>		2.3 to 6.0	V
Input "H"-level Voltage	V <sub>IH</sub>	GND ≤ V <sub>IN</sub> , I <sub>OUT</sub> = 200mA	V <sub>CC</sub> - 6.0 to V <sub>CC</sub> - 2.3	V
Input "L"-level Voltage	V <sub>IL</sub>	I <sub>OUT</sub> ≤ 100μA	V <sub>CC</sub> - 0.7 to V <sub>CC</sub> + 15	V

**Electrical Characteristics at 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-D181C**  
(unit : mm)

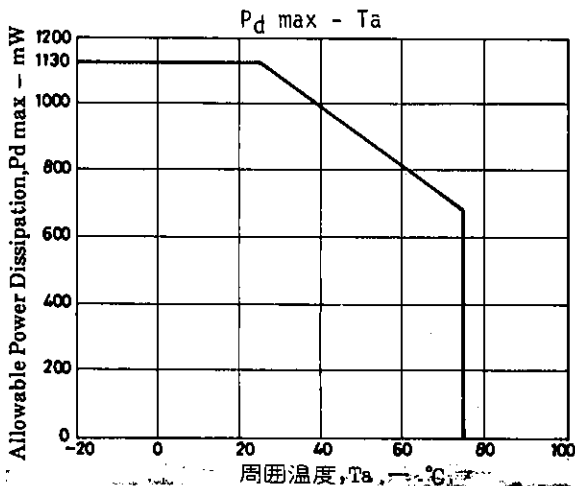
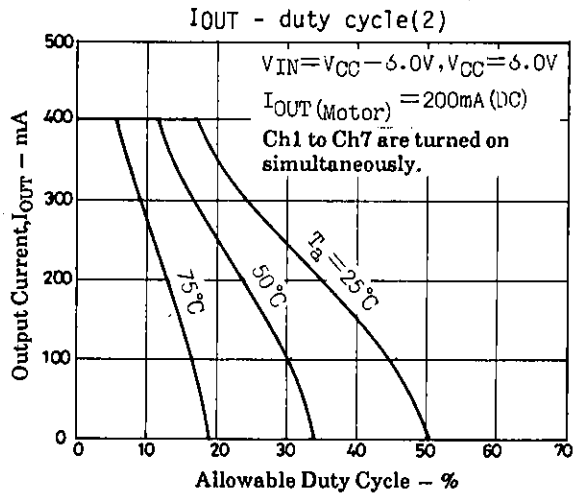
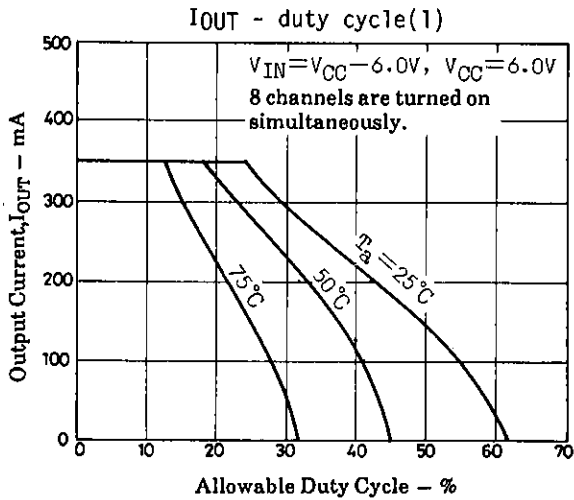
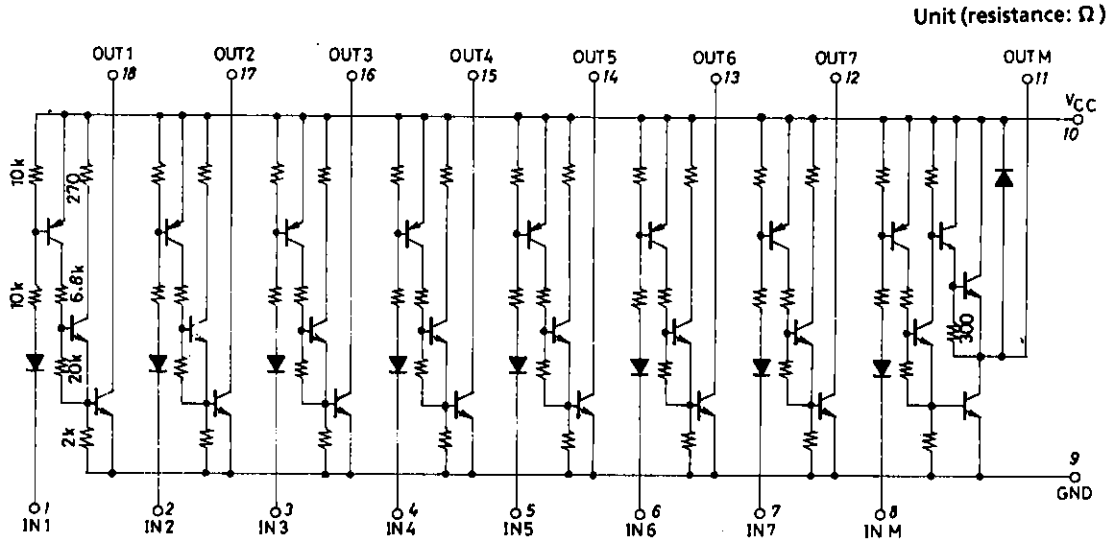


# LB1246

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			min	typ	max	unit
Output Sustain Voltage	$V_{O(SUS)}$	$I_{OUT} = 400\text{mA}$		10		V
Input Current	$I_{IN}$	$V_{CC} = 6.0\text{V}, V_{IN} = V_{CC} - 6.0\text{V}$	-1.0			mA
Supply Leakage Current	$I_{CC(OFF)}$	$V_{IN} = V_{CC} = 6.0\text{V}$			20	$\mu\text{A}$
Output Leakage Current	$I_{OFF}$	$V_{OUT} = V_{CC} = 6.0\text{V}, V_{IN} = V_{CC} = -0.7\text{V}$			100	$\mu\text{A}$
Spark Killer Diode Forward Voltage	$V_{F(S)}$	$I_{F(S)} = 400\text{mA}$			3.0	V

## Equivalent Circuit



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