



NO.993C

LB1257

8-Unit, Low-Saturation Driver

Applications

- . 4-phase stepping motor driver of 2 channels.
- . Especially suited for X-Y plotter driver (Meeting the requirements for Alps DPG plotter).
- . General-purpose 8-unit large current & low saturation voltage driver (Relay, LED, lamp, solenoid, etc.).

Features

- . Large current capacity (400mA) and low saturation voltage (0.5V max.).
- . With spark killer diode provided.

Absolute Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	VCCmax	-0.3 to +7.0	V
Output 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	400 mA
Maximum Forward Current	IFSM	Spark killer diode	400 mA
		Pulse width ≤ 35ms, duty 5%	
GND Pin Flow-out Current	IGND	Pulse width ≤ 35ms	3000 mA
Instantaneous Current Dissipation	Iccp	Pulse width ≤ 35ms, duty 5%	3000 mA
Allowable Power Dissipation	Pdmax		1.13 W
Operating Temperature	Topr		-20 to +75 °C
Storage Temperature	Tstg		-40 to +125 °C

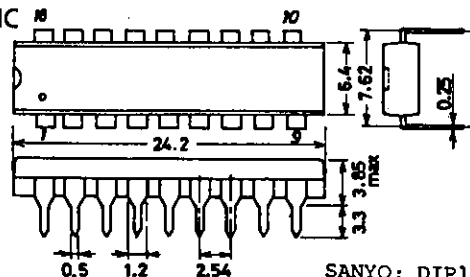
Allowable Operating Conditions at Ta=25°C

			unit
Supply Voltage	VCC	2.3 to 6.0	V
Input "H" Level Voltage	VIH	IOUT=200mA	2.3 to 7.0 V
Input "L" Level Voltage	VIL	IOUT ≤ 100µA	-0.3 to +0.7 V

Electrical Characteristics at Ta=25°C

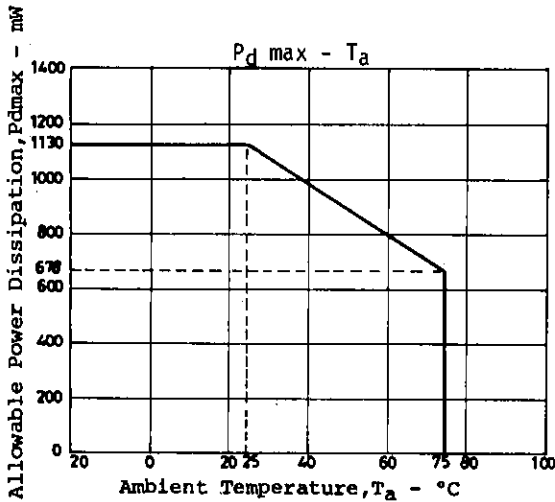
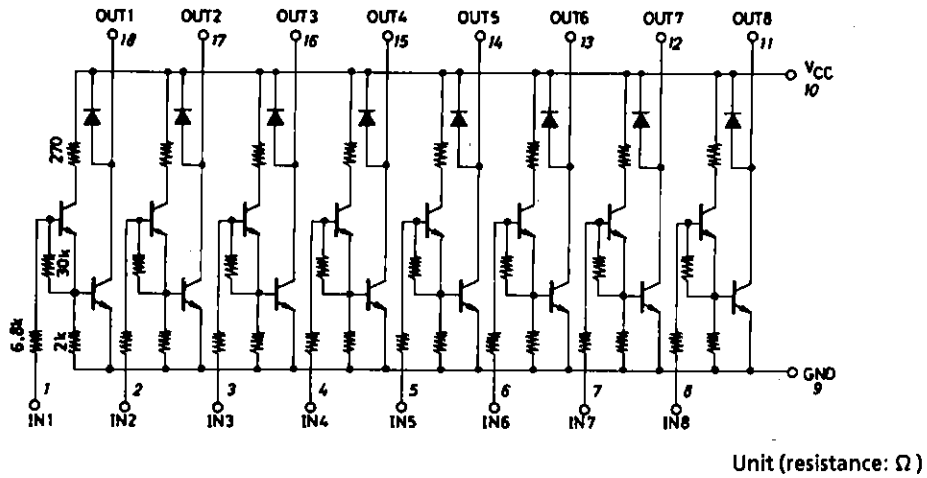
			min	typ	max	unit
Output Voltage	VOUT1	VIN=VCC=2.3V, IOUT=200mA		0.4		V
	VOUT2	VIN=3.0V, VCC=3.5V, IOUT=200mA		0.25		V
	VOUT3	VIN=5.5V, VCC=6.0V, VOUT=400mA		0.5		V
Output Sustain Voltage	VO(sus)	VIN : open, IOUT=400mA, t ≤ 10µs		10		V
Output Leak Current	Ioff	VIN=0.7V, VCC=6.0V, VOUT=6.0V		100		µA
Input Current	IIN	VIN=6.0V, IOUT=0		1.0		mA
Spark Killer Diode Reverse Current	Ileak(s)	VOUT=0, VCC=6.0V		30		µA
Spark Killer Diode Forward Voltage	VF(s)	IF(s)=400mA		3.0		V

Package Dimensions 3007A-D18IC
(unit : mm)

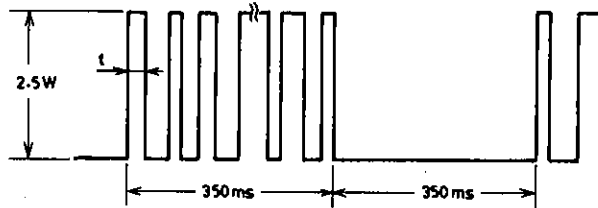


SANYO: DIP18

Equivalent Circuit



The loss of the following waveform is allowed at $T_a=60^\circ\text{C}$.



t(35ms and 40% duty of 350ms ($P_d=0.5W$))

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