

SANYO	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

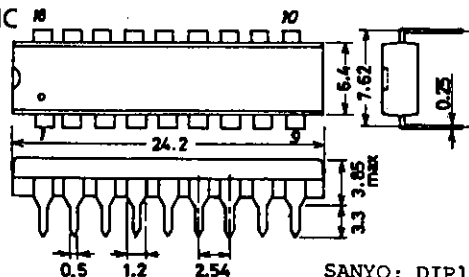
Allowable Operating Conditions at Ta=25°C

			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

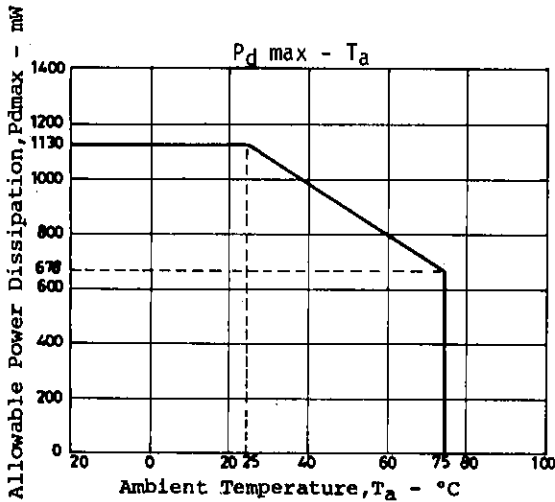
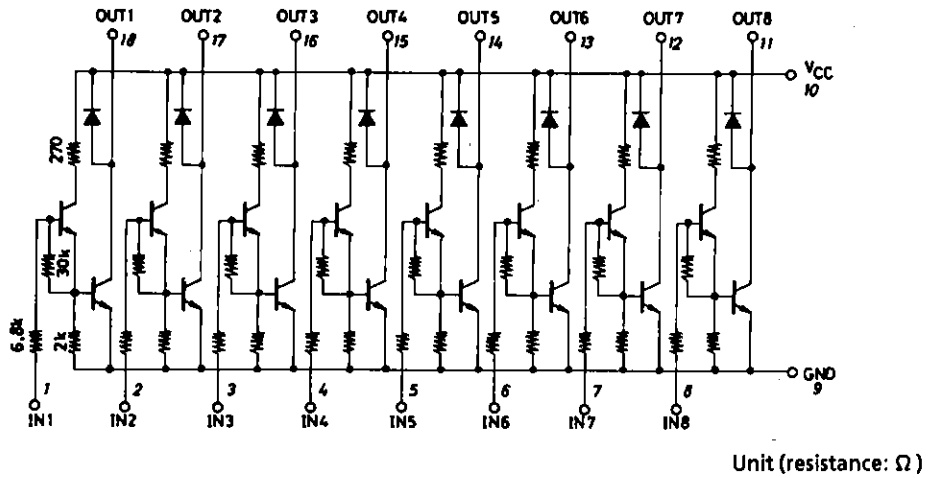
Electrical Characteristics at Ta=25°C

			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

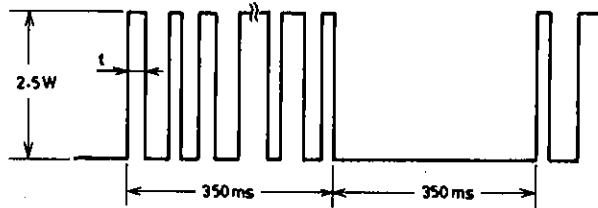
Package Dimensions 3007A-D18IC
(unit : mm)



Equivalent Circuit



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



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

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.