

SANYO

No.1367B

LB1247**Active-Low Input, 8-Unit, High-Current,
Low-Saturation Driver**

The LB1247 is a low active input type 8-unit driver array with high current, low saturation output.

Applications

- . 4-phase stepping motor driver of 2 channels.
- . Especially suited for X-Y axis plotter printer driver.
- . High current, low saturation voltage general-purpose 8-unit driver (relay, LED, lamp solenoid, etc.)

Features

- . Low active input type.
- . Input protecting diodes.
- . High current capacity (400mA) and low saturation voltage (0.5V_{max}).
- . With spark killer diodes.

Absolute Maximum Ratings at Ta=25°C

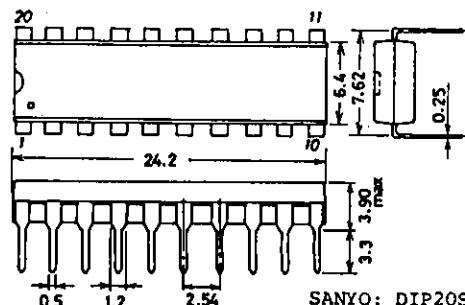
			unit
Maximum Supply Voltage	V _{CC1,2max}	-0.3 to +7.0	V
Output Supply Voltage	V _{OUT}	-0.3 to +10.0	V
Input Supply Voltage	V _{IN} GND ≤ V _{IN}	V _{DD} -7.0 to V _{DD} +15	V
Output Current	I _{OUT} Per unit	400	mA
Spark Killer Diode	I _{FSM} Pulse width ≤ 35ms	400	mA
Forward Current	duty 5%		
GND Pin Current	I _{GND} Pulse width ≤ 35ms	3000	mA
Instantaneous Current	I _{CCP} Pulse width ≤ 35ms	3000	mA
Dissipation	duty 5%		
Allowable Power Dissipation	P _{dmax}	1130	mW
Operating Temperature	T _{opr}	-20 to +75	°C
Storage Temperature	T _{stg}	-40 to +125	°C

Allowable Operating Conditions at Ta=25°C

			unit
Supply Voltage	V _{CC1}	2.3 to 6.0	V
	V _{DD}	2.3 to 6.0	V
"H" Level Input Voltage	V _{IH} GND ≤ V _{IN} , I _{OUT} =200mA	V _{DD} -6.0 to V _{DD} -2.3	V
"L" Level Input Voltage	V _{IL} I _{OUT} ≤ 100μA	V _{DD} -0.7 to V _{DD} +15	V

Package Dimensions 3021B-D20SIC

(unit : mm)

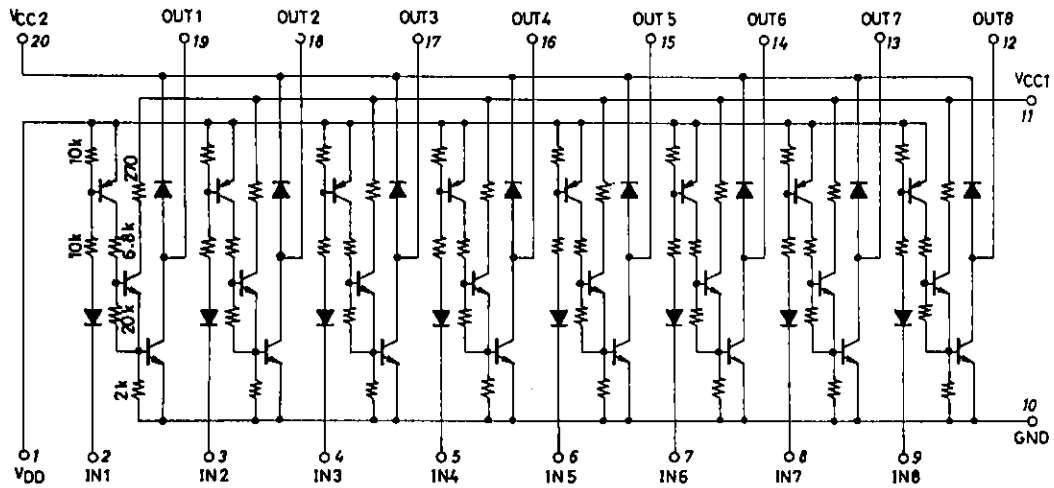
**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

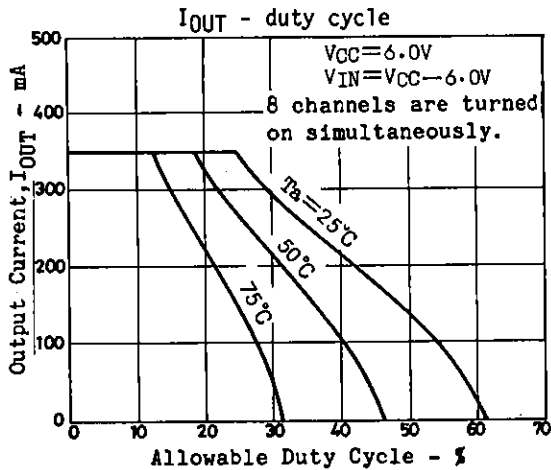
7067KI/7315/N143KI, TS No.1367-1/3

Electrical Characteristics at $T_a=25^{\circ}\text{C}$, $V_{DD}=V_{CC1}=V_{CC}$			min	typ	max	unit
Output Voltage	V_{OUT1}	$V_{CC}=2.3\text{V}, V_{IN}=V_{CC}-2.3\text{V},$ $I_{OUT}=200\text{mA}$			0.4	V
Output Voltage	V_{OUT2}	$V_{CC}=3.5\text{V}, V_{IN}=V_{CC}-3.0\text{V},$ $I_{OUT}=200\text{mA}$			0.25	V
Output Voltage	V_{OUT3}	$V_{CC}=6.0\text{V}, V_{IN}=V_{CC}-5.5\text{V},$ $I_{OUT}=400\text{mA}$			0.5	V
Output Sustain Voltage	$V_{O(sus)}$	$I_{OUT}=400\text{mA}, t \leq 10\text{usec}$	10			V
Input Current	I_{IN}	$V_{IN}=V_{CC}-6.0\text{V}, I_{OUT}=0$	-1.0			mA
Supply Leakage Current	$I_{CC(OFF)}$	$V_{CC}=6.0\text{V}, V_{IN}=V_{CC}$			20	μA
Output Leakage Current	I_{OFF}	$V_{OUT}=V_{CC}=6.0\text{V}, V_{IN}=V_{CC}-0.7\text{V}$			100	μA
Spark Killer Diode Forward Voltage	$V_{F(S)}$	$I_{F(S)}=400\text{mA}$			3.0	V
Spark Killer Diode Reverse Current	$I_{R(S)}$	$V_{OUT}=0\text{V}, V_{CC2}=6.0\text{V}$			30	μA

Equivalent Circuit



Unit (resistance: Ω)



- 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.