

**SANYO**

NO.1281D

**LB1268****3-Channel, High-Current,  
Low-Saturation Driver Array****Features and Functions**

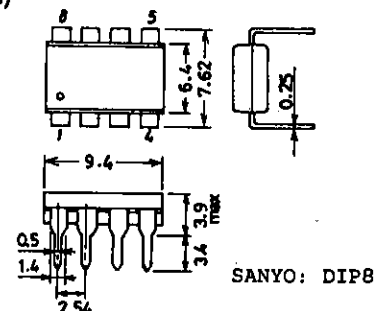
- 3-channel magnet driver
- High current (2.0A max.) and low saturation voltage (1.5V)
- Parallel operation capability (channel 1 + 2)
- On-chip spark killer diodes

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

			unit
Maximum Supply Voltage	V <sub>CC</sub> max	8.0	V
Output Supply Voltage	V <sub>OUT</sub>	10.0	V
Input Supply Voltage	V <sub>IN</sub>	12.0	V
Output Current	I <sub>OUT1</sub>	ton ≤ 50ms, duty = 20%, solenoid drive stage (ch1,2)	1.0 A
	I <sub>OUT2</sub>	ton ≤ 50ms, duty = 5%, motor drive stage (ch3)	2.5 A
Spark Killer Diode Forward Current	I <sub>FSM1</sub>	t ≤ 5ms, duty = 5%, solenoid drive stage (ch1,2)	1.0 A
	I <sub>FSM2</sub>	t ≤ 5ms, duty = 5%, motor drive stage (ch3)	2.5 A
V <sub>CC</sub> Instantaneous Flow-Out Current	I <sub>CCP</sub>	t ≤ 5ms, duty = 5%,	3.0 A
GND Pin Flow-Out Current	I <sub>GND</sub>	t ≤ 5ms, duty = 20%,	3.0 A
Allowable Power Dissipation	P <sub>d</sub> max	785	mW
Operating Temperature	T <sub>opr</sub>	-20 to +75	°C
Storage Temperature	T <sub>stg</sub>	-40 to +125	°C

**Allowable Operating Range at Ta = 25°C**

			unit
Supply Voltage	V <sub>CC</sub>	3.0 to 7.0	V
Input 'H'-Level Voltage	V <sub>IH</sub>	I <sub>OUT</sub> = 300mA	3.0 to 11.0 V
Input 'L'-Level Voltage	V <sub>IL</sub>	I <sub>OUT</sub> ≤ 100μA	-0.3 to +0.7 V

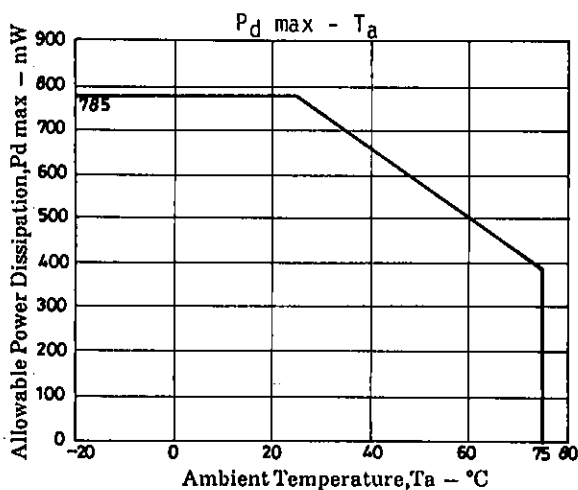
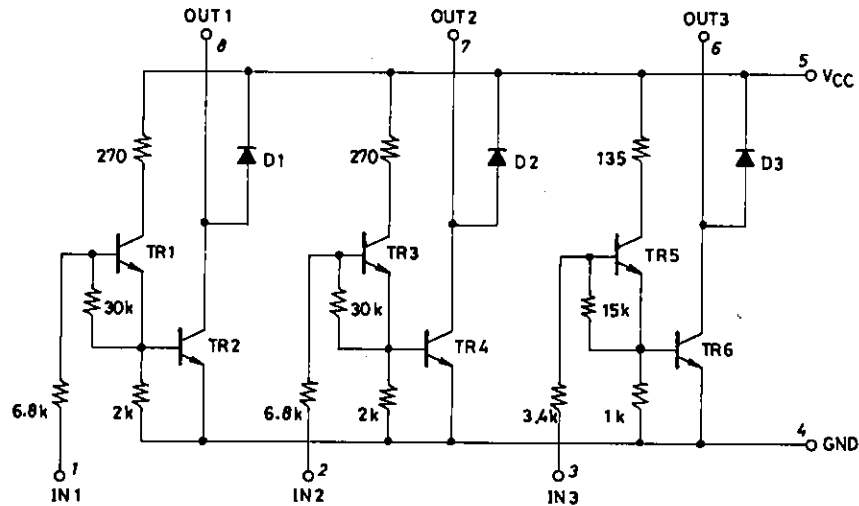
**Package Dimensions 3001B-D81C**  
(unit : mm)

# LB1268

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

			min	typ	max	unit
Output Voltage	$V_{OH1}$	$V_{IN} = 4.5\text{V}, V_{CC} = 5.0\text{V},$ $I_{OUT} = 500\text{mA}$ (ch1,2)			0.65	V
	$V_{OH2}$	$V_{IN} = 6.0\text{V}, V_{CC} = 7.0\text{V},$ $I_{OUT} = 1000\text{mA}$ (ch1,2)			1.4	V
	$V_{OH3}$	$V_{IN} = 6.0\text{V}, V_{CC} = 7.0\text{V},$ $I_{OUT} = 1600\text{mA}$ (ch1,2 parallel)			1.4	V
	$V_{OH4}$	$V_{IN} = 3.0\text{V}, V_{CC} = 3.0\text{V},$ $I_{OUT} = 300\text{mA}$ (ch3)			0.25	V
	$V_{OH5}$	$V_{IN} = 4.5\text{V}, V_{CC} = 5.0\text{V},$ $I_{OUT} = 1000\text{mA}$ (ch3)		0.5	0.7	V
	$V_{OH6}$	$V_{IN} = 6.0\text{V}, V_{CC} = 7.0\text{V},$ $I_{OUT} = 2000\text{mA}$ (ch3)		1.0	1.5	V
Input Current	$I_{IN1}$	$V_{IN} = 6.0\text{V}$ (ch1,2)			1.0	mA
	$I_{IN2}$	$V_{IN} = 6.0\text{V}$ (ch3)			2.0	mA
Power Source + Output Leakage Current	$I_{OFF}$	$V_{IN} = 0.5\text{V}, V_{OUT} = V_{CC} = 6.0\text{V}$			30	$\mu\text{A}$
Spark Killer Diode Forward Voltage	$V_{F1}$	$I_F = 1000\text{mA}$ (ch1,2)			3.0	V
	$V_{F2}$	$I_F = 2000\text{mA}$ (ch3)			3.0	V
Output Sustain Voltage	$V_{O(sus)}$	$I_{OUT} = 400\text{mA}$	10			V

## Equivalent Circuit



Unit (resistance:  $\Omega$ )

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