

SANYO

NO.1281D

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

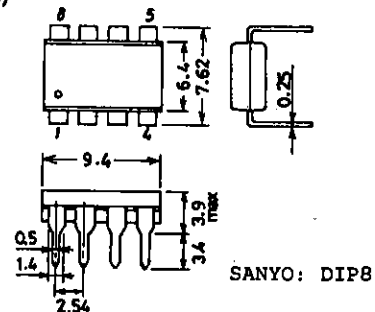
- 3-channel magnet driver
- High current (2.0A max.) and low saturation voltage (1.5V)
- Parallel operation capability (channel 1 + 2)
- On-chip spark killer diodes

Absolute Maximum Ratings at Ta = 25°C

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

Allowable Operating Range at Ta = 25°C

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

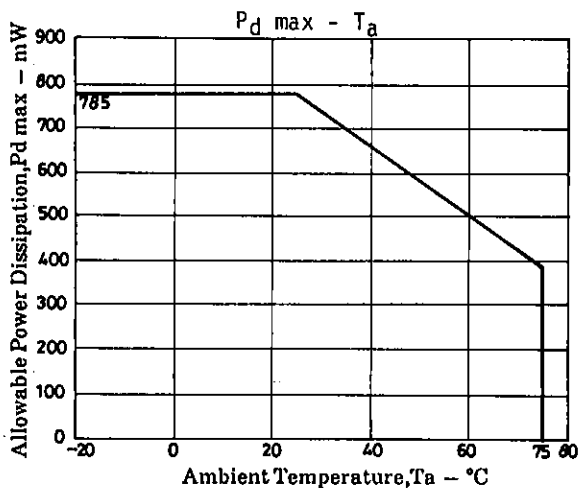
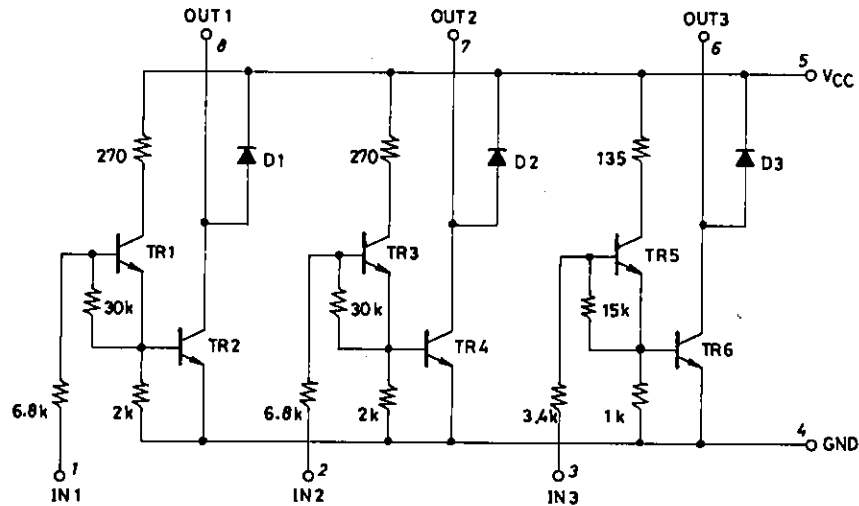
Package Dimensions 3001B-D81C
(unit : mm)

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	μA
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: Ω)

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