

SANYO

NO.1235C

LB1258**7-Unit, Low-Saturation Driver**

The LB1258 is a 7-unit driver array with large current, low saturation output. It is suited for low voltage, large current drivers.

Features

- Large current capacity (500mA) and low saturation voltage (0.65 Vmax).
- Especially suited for battery-powered printer drivers of various types and general-purpose 7-unit large current & low saturation voltage drivers.

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Value | unit |
|-----------------------------|---------------------|---------------------------------|----------------|
| Maximum Supply Voltage | V _{CC} max | -0.3 to +7.0 | V |
| Output Supply Voltage | V _{OUT} | -0.3 to +10.0 | V |
| Input Supply Voltage | V _{IN} | -0.3 to +7.0 | V |
| Maximum Output Current | I _{OUT} | Per unit, pulse width ≤ 35ms | 500 mA |
| GND Pin Flow-out Current | I _{GND} | Pulse width ≤ 35ms | 3000 mA |
| Allowable Power Dissipation | P _d max | | 960 mW |
| Operating Temperature | T _{opr} | | -20 to +75 °C |
| Storage Temperature | T _{stg} | | -40 to +125 °C |

Allowable Operating Conditions at Ta = 25°C

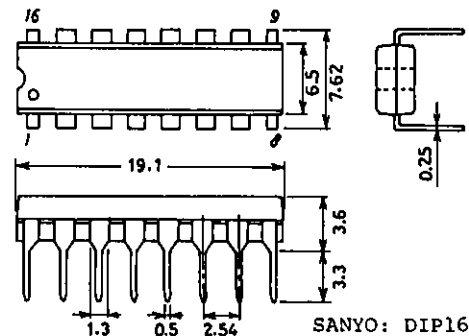
| Parameter | Symbol | Value | unit |
|-------------------------|-----------------|--------------------------|----------------|
| Supply Voltage | V _{CC} | 2.5 to 6.0 | V |
| Input "H"-level Voltage | V _{IH} | I _{OUT} = 150mA | 2.5 to 7.0 V |
| Input "L"-level Voltage | V _{IL} | I _{OUT} ≤ 100μA | -0.3 to +0.7 V |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | min | typ | max | unit |
|---------------------------------|---------------------|--|-----|-----|------|------|
| Output Voltage | V _{OUT1} | V _{IN} = 3.0V, V _{CC} = 3.5V I _{OUT} = 200mA | | | 0.25 | V |
| | V _{OUT2} | V _{IN} = 5.5V, V _{CC} = 6.0V I _{OUT} = 400mA | | | 0.5 | V |
| | V _{OUT3} | V _{IN} = 5.5V, V _{CC} = 6.0V I _{OUT} = 500mA | | | 0.65 | V |
| Output Sustain Voltage | V _{O(SUS)} | V _{IN} : open, I _{OUT} = 400mA t ≤ 10μs | 10 | | | V |
| Supply + Output Leakage Current | I _(OFF) | V _{IN} = 0.5V, V _{OUT} = V _{CC} = 6.0V | | | 30 | μA |
| Input Current | I _{IN} | V _{IN} = 6.0V, I _{OUT} = 0 | | | 2.5 | mA |

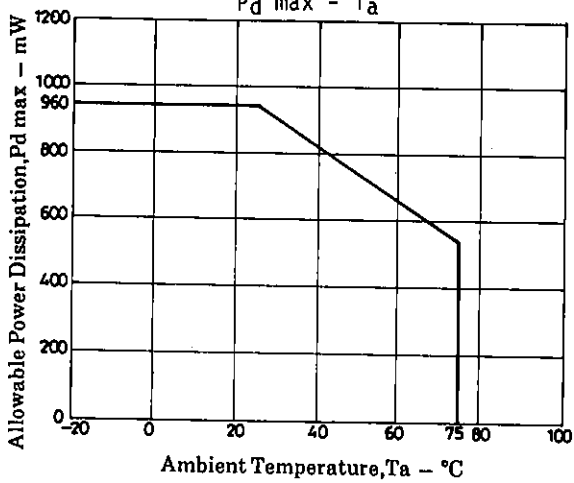
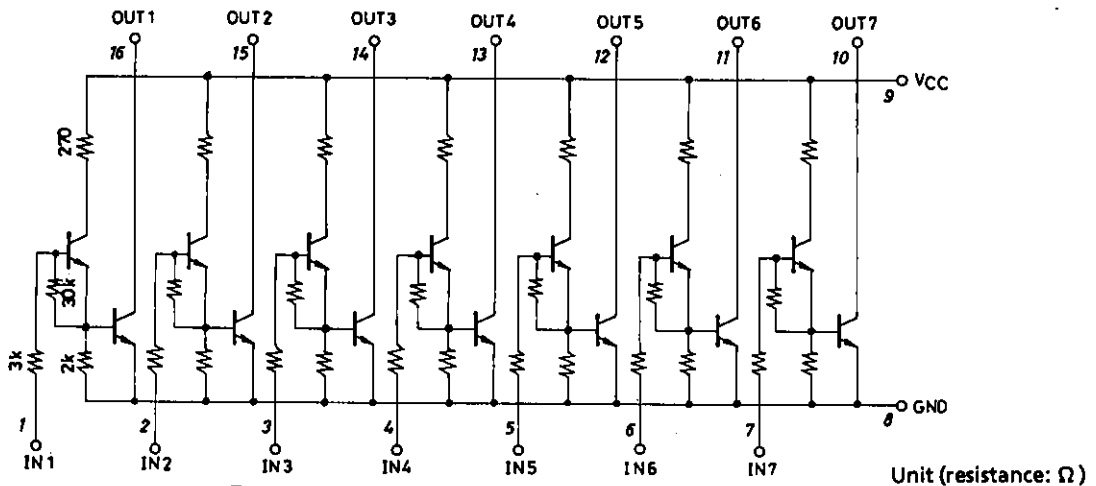
Package Dimensions 3064-D16TR

(unit : mm)

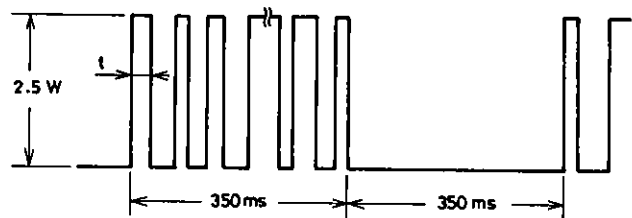
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Equivalent Circuit



Dissipation for the following waveform at $T_a = 60^\circ\text{C}$.



$t \leq 35\text{ms}$ and 40% 350ms duty ($\overline{P_d} = 0.5\text{W}$)

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