

SANYO

NO.886D

LB1256

Printer Driver

The LA1256 is a 7-units driver array, possessing high-current, low-saturating outputs. It has a motor driver circuit equipped with a brake circuit. It is suited for low-voltage, high-current driver use.

FEATURES

1. Has a large current capacity (400 mA) and a low saturation voltage (0.5 V max.).
2. Has a motor driver with a spark suppressor.
3. Ideal for various battery-operated printer drivers.

ABSOLUTE MAXIMUM RATINGS/T_a = 25°C

| | | | | unit |
|-----------------------------------|---------------------|-------------------------------|------------|------|
| Maximum power supply voltage | V _{CC} max | -0.3 ~ +7.0 | V | |
| Maximum supply voltage | V _{OUT} | -0.3 ~ +10.0 | V | |
| Input supply voltage | V _{IN} | -0.3 ~ +7.0 | V | |
| Maximum output current | I _{OUT} | Per unit: pulse width < 35 ms | 400 | mA |
| Maximum forward current | I _{FSM} | Spark suppressor diode | 700 | mA |
| | | Pulse width < 35 ms, 5% duty | | |
| GND pin flow-out current | I _{GND} | Pulse width < 35 ms | 3000 | mA |
| Instantaneous current consumption | I _{CCP} | Pulse width < 35 ms, 5% duty | 700 | mA |
| Allowable power dissipation | P _d max | T _a = 55°C | 700 | mW |
| Operating temperature | T _{opr} | | -20 ~ +75 | °C |
| Storage temperature | T _{stg} | | -40 ~ +125 | °C |

ALLOWABLE OPERATING CONDITIONS/T_a = 25°C

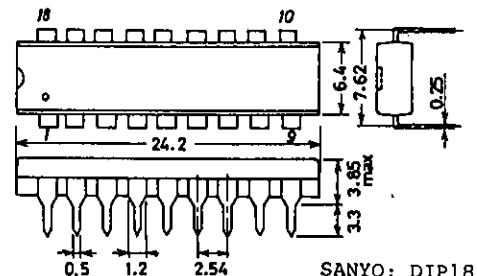
| | | | | unit |
|-----------------------|-----------------|---------------------------|-------------|------|
| Supply voltage | V _{CC} | 2.0 ~ 6.0 | V | |
| Input H level voltage | V _{IH} | I _{OUT} = 150 mA | 2.0 ~ 7.0 | V |
| Input L level voltage | V _{IL} | I _{OUT} = 100 μA | -0.3 ~ +0.7 | V |

ELECTRICAL CHARACTERISTICS/T_a = 25°C

| | | | min | typ | max | unit |
|---------------------------|--------------------|--|-----|-----|------|------|
| Output voltage | V _{OUT 1} | V _{IN} = 2.0 V, V _{CC} = 2.0 V, I _{OUT} = 150 mA | | | 0.3 | V |
| | V _{OUT 2} | V _{IN} = 3.0 V, V _{CC} = 3.5 V, I _{OUT} = 200 mA | | | 0.25 | V |
| | V _{OUT 3} | V _{IN} = 5.5 V, V _{CC} = 6.0 V, I _{OUT} = 400 mA | | | 0.50 | V |
| Output sustaining voltage | V _{0sus} | V _{IN} : open, I _{OUT} = 400 mA, < 10 μs | | | 10 | V |

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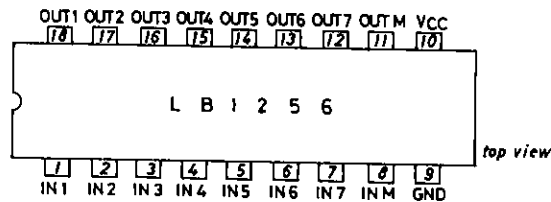
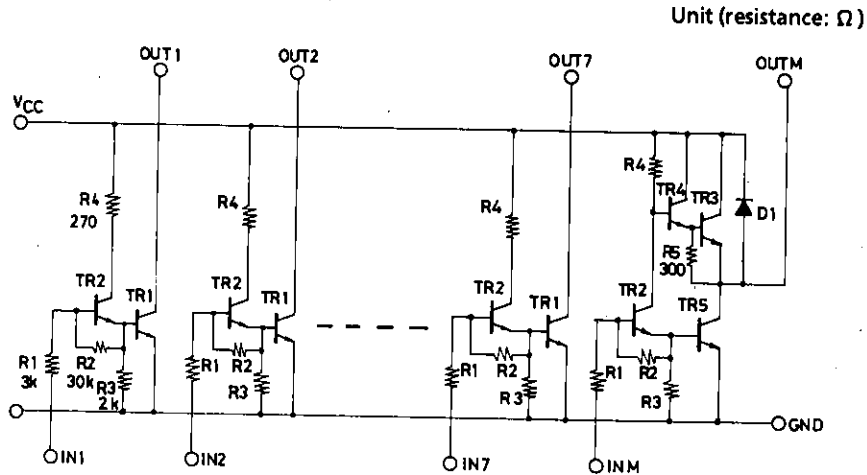
Package Dimensions 3007A-D18IC
(unit : mm)



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| | | | min | typ | max | unit |
|--|-----------|--|-----|-----|-----|---------------|
| Output leakage current | I_{off} | $V_{IN} = 0.7 \text{ V}, V_{CC} = 6 \text{ V}$ | | | 100 | μA |
| Input current | I_{IN} | $V_{IN} = 6.0 \text{ V}, I_{OUT} = 0$ | | | 2.5 | mA |
| Spark suppressor diode forward voltage | $V_F(s)$ | $I_F(s) = 400 \text{ mA}$ | | | 3.0 | V |

EQUIVALENT CIRCUIT AND PIN ASSIGNMENT



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