Monolithic Digital IC

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 Pulse width < 35 ms, 5% duty	700	mA
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	Topr		−20 ~ +75	°C
Storage temperature	T_{stg}		−40 ~ +125	°C

ALLOWABLE OPERATING CONDITIONS/T_a = 25°C

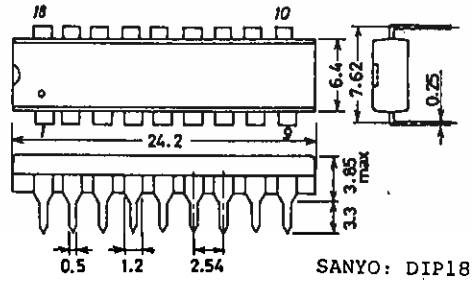
				unit
Supply voltage	V_{CC}		2.0 ~ 6.0	V
Input H level voltage	V_{IH}	I_{OUT} = 150 mA	2.0 ~ 7.0	V
Input L level voltage	V_{IL}	I_{OUT} = 100 μA	−0.3 ~ +0.7	V

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_{Osus}	V_{IN}: open, I_{OUT} = 400 mA, < 10 μs	10			V

Continued on next page.

Package Dimensions 3007A-D18IC
(unit : mm)



SANYO: DIP18

Continued from preceding page.

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

EQUIVALENT CIRCUIT AND PIN ASSIGNMENT

Unit (resistance: Ω)