Monolithic Digital IC

SANYO NO.1620C

LB1256M

Printer Driver

Overview

The LB1256M is a 7-unit driver array possessing high-current, low-saturation outputs. It has a motor driver circuit equipped with a brake circuit. It is suited for low-voltage, high-current drivers.

Features

- Large current capacity (400mA) and low saturation voltage (0.5V max.)
- Motor driver with spark killer
- Suited for various battery-operated printer drivers

Absolute Maximum Ratings at Ta = 25°C

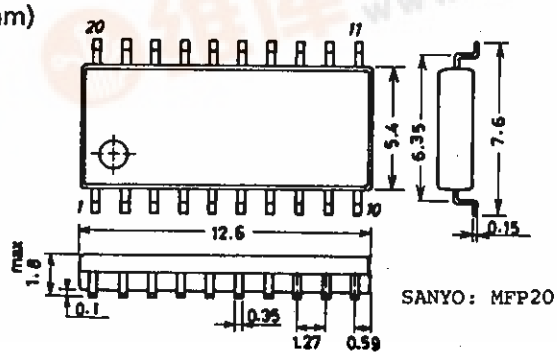
				unit
Maximum Supply Voltage	V_{CC} max		−0.3 to +7.0	V
Output Supply Voltage	V_{OUT}		−0.3 to +10.0	V
Input Supply Voltage	V_{IN}		−0.3 to +7.0	V
Maximum Output Current	I_{OUT}	Per unit	560	mA
Spark Killer Diode Forward Current	I_{FSM}	Pulse width≦35ms,duty=5%	700	mA
GND Pin Flow-Out Current	I_{GND}		*3.4	A
Instantaneous Current Dissipation	I_{CCP}	Pulse width≦35ms,duty=5%	700	mA
Allowable Power Dissipation	Pd max		370	mW
Operating Temperature	Topr		−20 to +75	°C
Storage Temperature	Tstg		−40 to +125	°C

* : Both pins 1 and 10 must be grounded.

Allowable Operating Range at Ta = 25°C

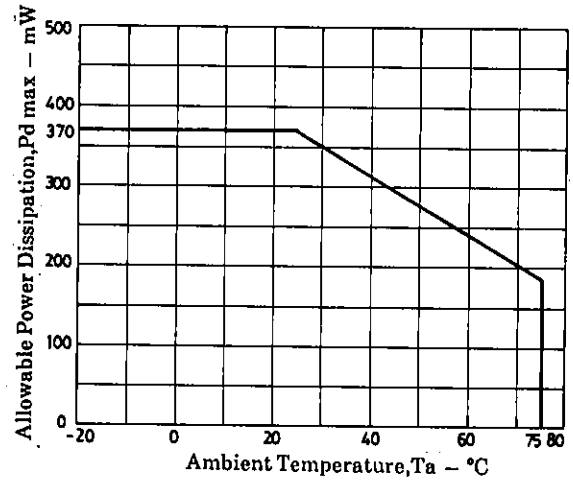
				unit
Supply Voltage	V_{CC}		2.0 to 6.0	V
Input 'H'-Level Voltage	V_{IH}	I_{OUT}=150mA	2.0 to 7.0	V
Input 'L'-Level Voltage	V_{IL}	I_{OUT}≦100μA	−0.3 to +0.7	V

Package Dimensions 3036B-M20IC
(unit : mm)

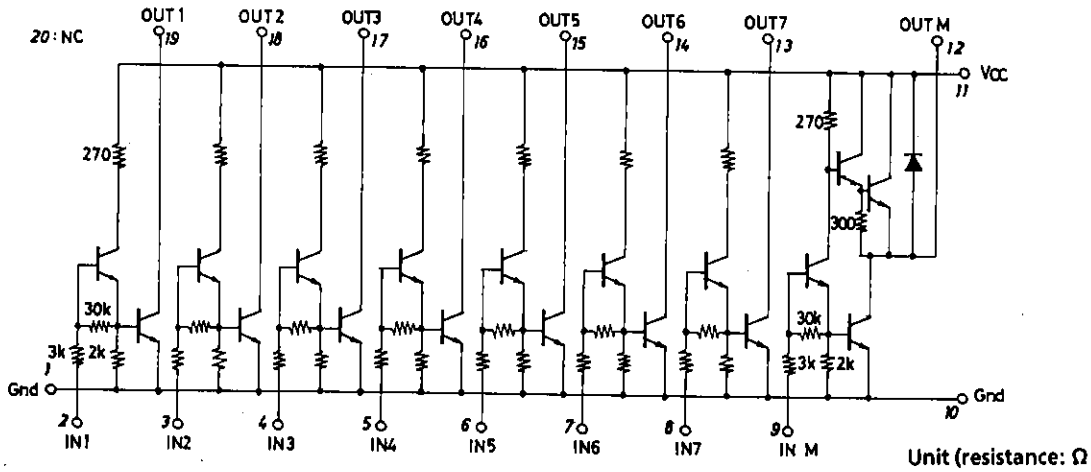


Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Output Voltage	V_{OUT1}	$V_{IN}=V_{CC}=2.0V, I_{OUT}=150mA$			0.30	V
	V_{OUT2}	$V_{IN}=3.0V, V_{CC}=3.5V, I_{OUT}=200mA$			0.25	V
	V_{OUT3}	$V_{IN}=3.5V, V_{CC}=5.0V, I_{OUT}=450mA$			0.60	V
Output Sustain Voltage	$V_{O(sus)}$	$I_{OUT}=400mA$	10			V
Input Current	I_{IN}	$V_{IN}=6.0V$			2.5	mA
Output Leakage Current	I_{OFF}	$V_{IN}=0.7V, V_{CC}=V_{OUT}=6.0V$			100	μA
Spark Killer Diode Forward Voltage	V_{Fs}	$I_{Fs}=400mA$			3.0	V



Equivalent Circuit



Unit (resistance: Ω)