



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 a spark killer.
- Suited for various battery-operated printer drivers.

Specifications

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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 drain	I _{CCP}	Pulse width<35ms, duty 5%	700	mA
Allowable power dissipation	Pd max		370	mW
Operating temperature	T _{opr}		-20 to +75	°C
Storage temperature	T _{stg}		-40 to +125	°C

* : Both pins 1 and 10 must be grounded.

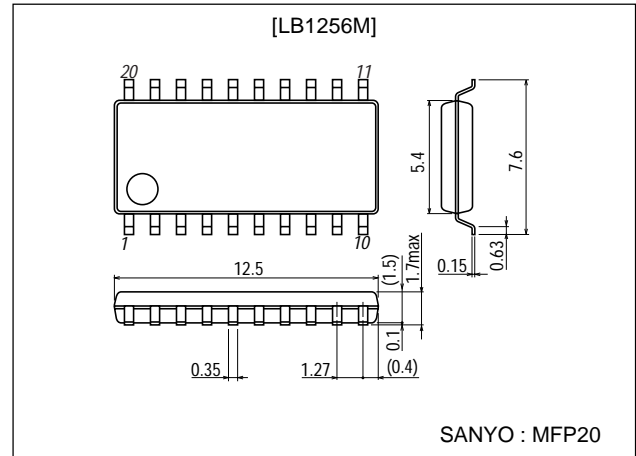
Allowable Operating Ranges at Ta = 25°C

Parameter	Symbol	Conditions	Ratings	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

unit:mm

3036C-MFP20



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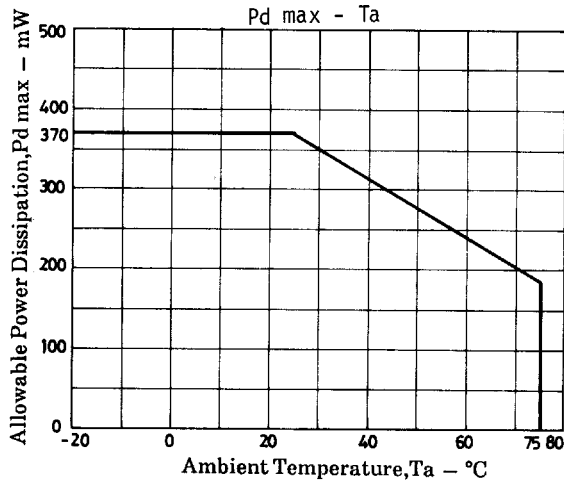
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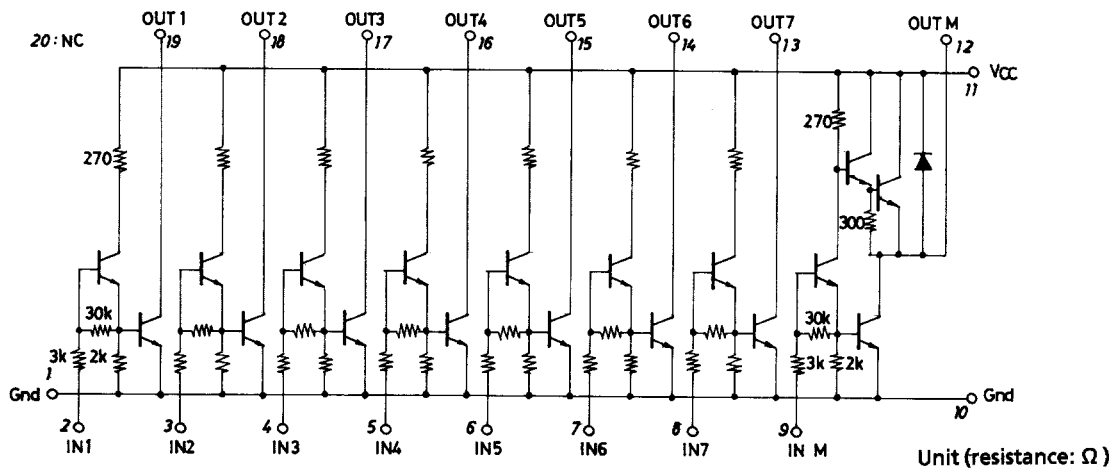
LB1256M

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V_{OUT1}	$V_{IN}=V_{CC}=2.0\text{V}, I_{OUT}=150\text{mA}$			0.30	V
	V_{OUT2}	$V_{IN}=3.0\text{V}, V_{CC}=3.5\text{V}, I_{OUT}=200\text{mA}$			0.25	V
	V_{OUT3}	$V_{IN}=3.5\text{V}, V_{CC}=5.0\text{V}, I_{OUT}=450\text{mA}$			0.60	V
Output sustain voltage	$V_{O(sus)}$	$I_{OUT}=400\text{mA}$	10			V
Input current	I_{IN}	$V_{IN}=6.0\text{V}$			2.5	mA
Output leakage current	I_{OFF}	$V_{IN}=0.7\text{V}, V_{CC}=V_{OUT}=6.0\text{V}$			100	μA
Spark killer diode forward voltage	V_{Fs}	$I_{Fs}=400\text{mA}$			3.0	V



Equivalent Circuit



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