



LB1258

7-Unit, Low-Saturation Driver

Overview

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 (0.65V max).
- Especially suited for battery-powered printer drivers of various types and general-purpose 7-unit large current & low saturation voltage drivers.

Specifications

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC \text{ max}}$		-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 $\leq 35\text{ms}$	500	mA
GND pin flow-out current	I_{GND}	Pulse width $\leq 35\text{ms}$	3000	mA
Allowable power dissipation	$P_d \text{ max}$		960	mW
Operating temperature	T_{opr}		-20 to +75	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +125	$^\circ\text{C}$

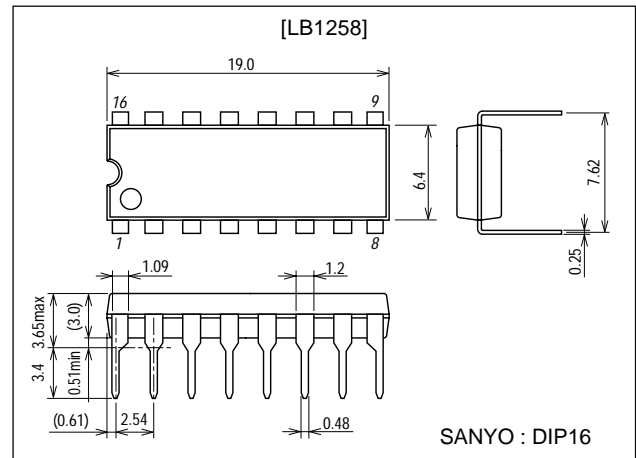
Allowable Operating Ranges at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	V_{CC}		2.5 to 6.0	V
Input H-level voltage	V_{IH}	$I_{OUT} = 150\text{mA}$	2.5 to 7.0	V
Input L-level voltage	V_{IL}	$I_{OUT} \leq 100\mu\text{A}$	-0.3 to +0.7	V

Package Dimensions

unit:mm

3006C-DIP16



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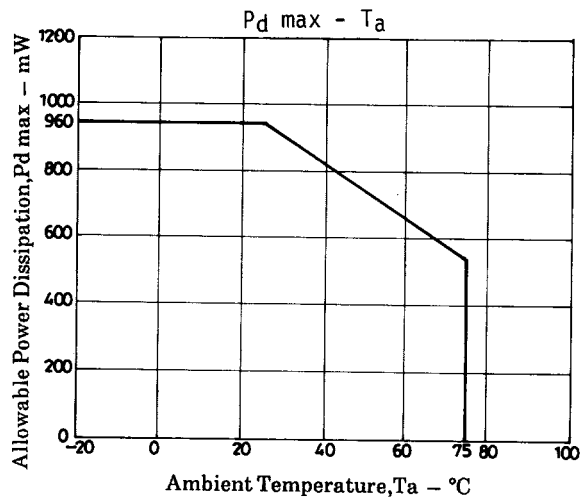
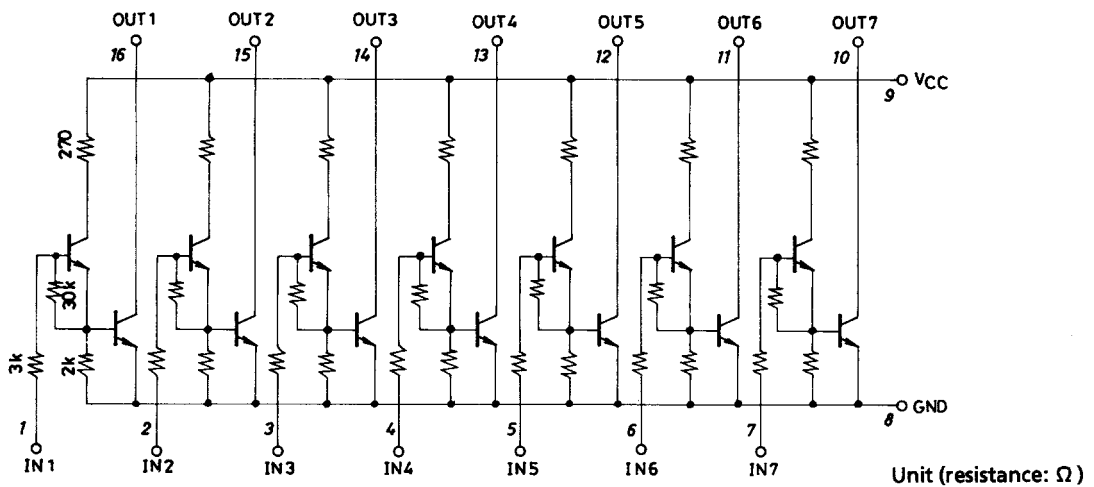
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LB1258

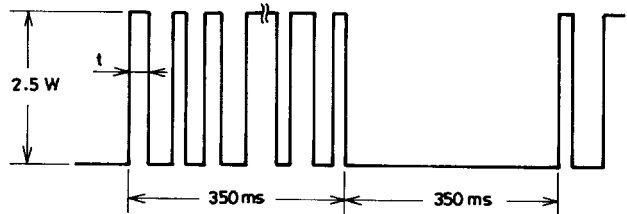
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	V_{OUT1}	$V_{IN}=3.0\text{V}, V_{CC}=3.5\text{V}, I_{OUT}=200\text{mA}$			0.25	V
	V_{OUT2}	$V_{IN}=5.5\text{V}, V_{CC}=6.0\text{V}, I_{OUT}=400\text{mA}$			0.5	V
	V_{OUT3}	$V_{IN}=5.5\text{V}, V_{CC}=6.0\text{V}, I_{OUT}=500\text{mA}$			0.65	V
Output sustain voltage	$V_{O(SUS)}$	V_{IN} : open, $I_{OUT}=400\text{mA}, t \leq 10\mu\text{s}$	10			V
Supply+output leakage current	$I_{(OFF)}$	$V_{IN}=0.5\text{V}, V_{OUT}=V_{CC}=6.0\text{V}$			30	μA
Input current	I_{IN}	$V_{IN}=6.0\text{V}, I_{OUT}=0$			2.5	mA

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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