

**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	$V_{CC}$ 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	$P_d$ max		960	mW
Operating temperature	$T_{opr}$		-20 to +75	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to +125	$^\circ\text{C}$

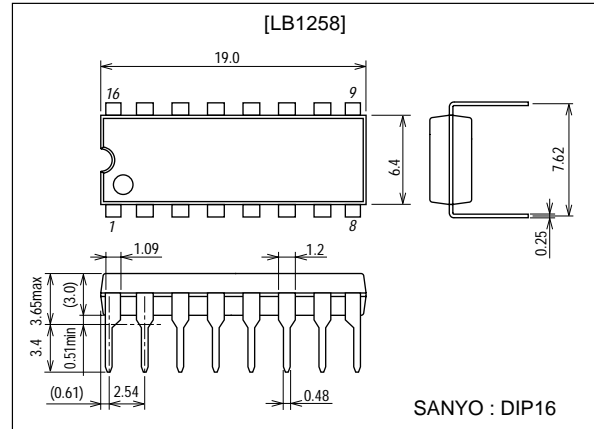
**Allowable Operating Ranges** at  $T_a = 25^\circ\text{C}$ 

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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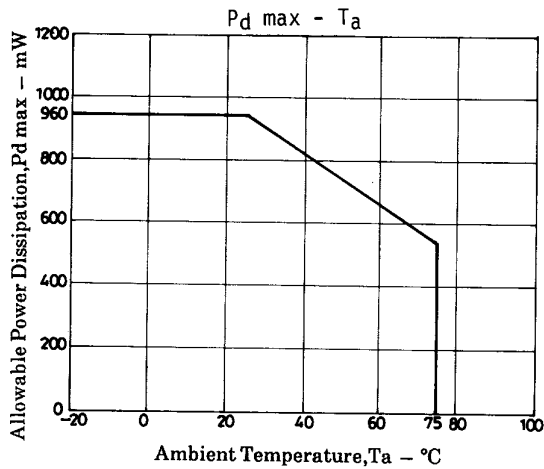
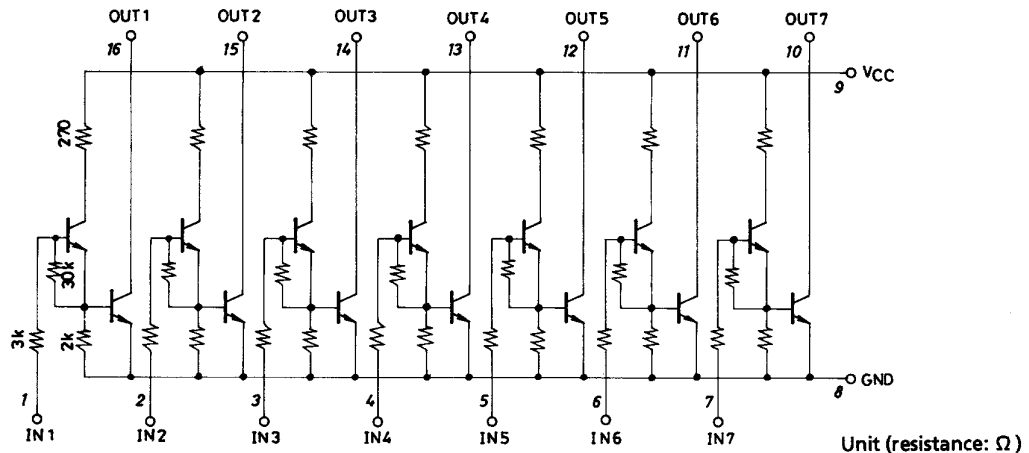
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# LB1258

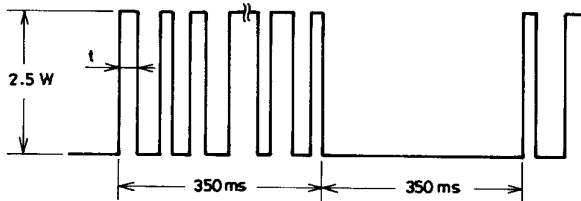
## Electrical Characteristics at $T_a = 25^\circ\text{C}$

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	$V_{O(SUS)}$	$V_{IN} : \text{open}, I_{OUT}=400\text{mA}, t \leq 10\mu\text{s}$	10			V
Supply+output leakage current	$I_{(OFF)}$	$V_{IN}=0.5\text{V}, V_{OUT}=V_{CC}=6.0\text{V}$			30	$\mu\text{A}$
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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