



# LB1294

## 6-Channel Driver Array

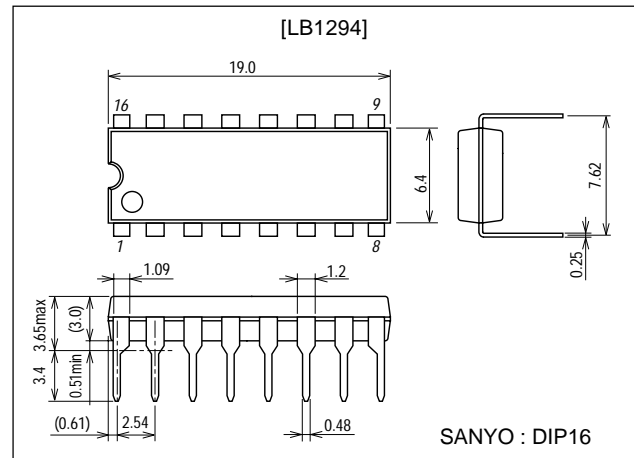
### Features

- 6 independent Darlington drivers.
- High voltage (60V), high output source current (60mA).
- Ideally suited for interface between different supply voltage systems.
- Wide duty cycle.
- Best applicable to system of 5V supply voltage.

### Package Dimensions

unit:mm

3006C-DIP16



### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC}$	$V_{CC}$ -Sub	-0.3 to +60	V
Output supply voltage	$V_{OUT}$	OUT-Sub	-0.3 to $V_{CC}$	V
$V_{EE}$ voltage range	$V_{EE}$	$V_{EE}-V_{CC}$ ( $\text{Sub} \leq V_{EE} \leq V_{CC}$ )	0 to 30	V
Input supply voltage	$V_{IN}$	$IN-V_{EE}$ ( $V_{IN} \leq V_{CC}$ )	0 to 30	V
Output current	$I_{OUT}$		0 to 60	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 +150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	$V_{CC}$		4.5 to 60	V
Input high-level voltage	$V_{IH}$	$I_{OUT} = -60\text{mA}$	$V_{EE} + 2.2$ to $V_{EE} + 30$	V
Input low-level voltage	$V_{IL}$	$I_{OUT} \leq -100\mu\text{A}$	$V_{EE} - 0.3$ to $V_{EE} + 0.4$	V

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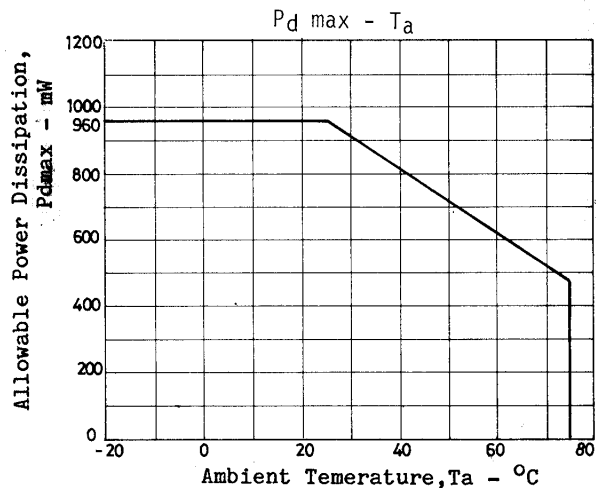
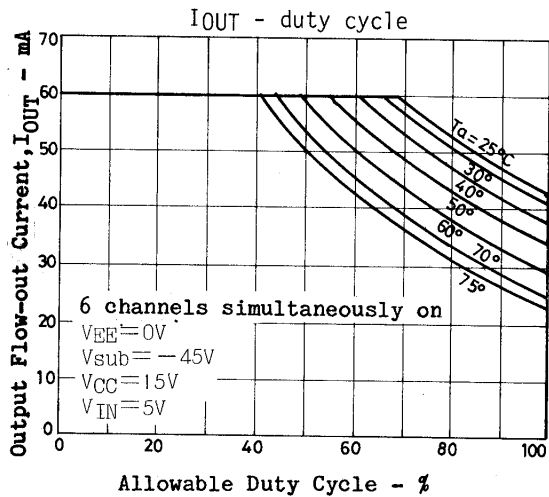
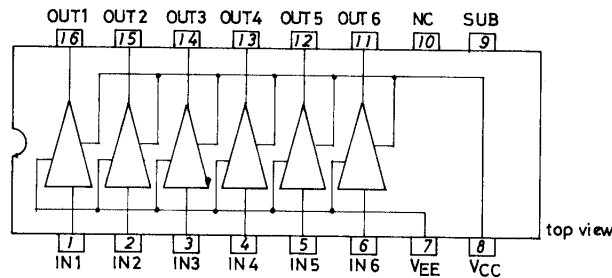
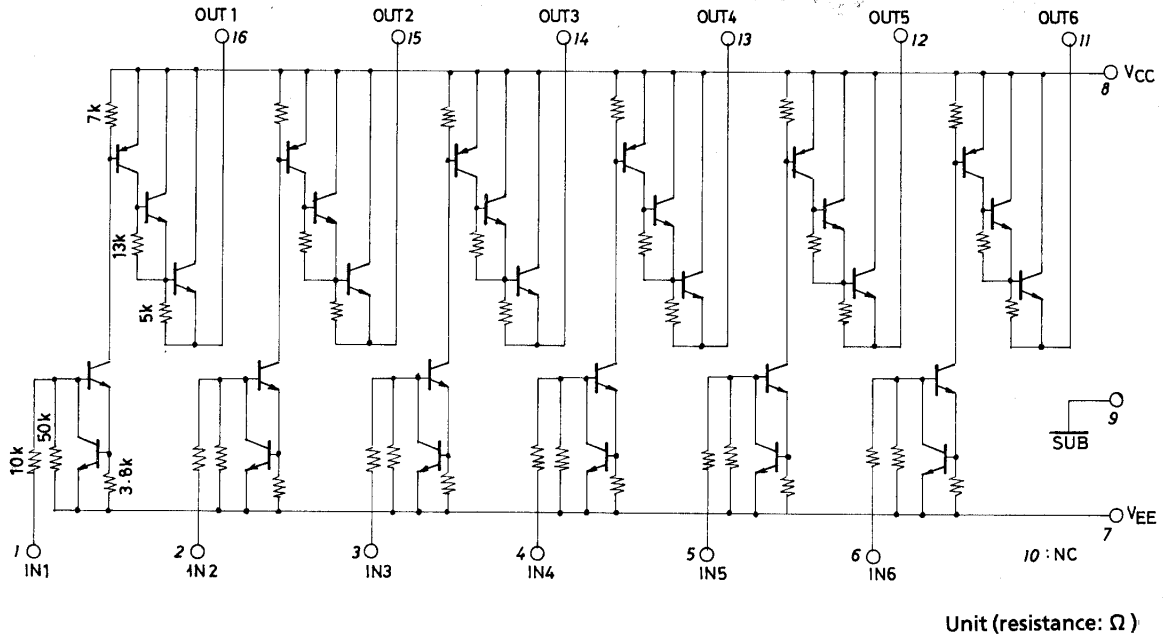
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**Electrical Characteristics** at  $T_a = 25^\circ\text{C}$ ,  $V_{\text{sub}} = -45\text{V}$ ,  $V_{\text{EE}} = 0\text{V}$ ,  $V_{\text{CC}} = 15\text{V}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output voltage	$V_{\text{OH1}}$	$V_{\text{IN}} = 10\text{V}$ , $I_{\text{OUT}} = -30\text{mA}$	$V_{\text{CC}} - 2.0$	$V_{\text{CC}} - 1.6$		V
	$V_{\text{OH2}}$	$V_{\text{IN}} = 10\text{V}$ , $I_{\text{OUT}} = -60\text{mA}$	$V_{\text{CC}} - 2.6$	$V_{\text{CC}} - 1.9$		V
Output leakage current	$I_{\text{OL}}$	$V_{\text{IN}} = 0.4\text{V}$ , $V_{\text{OUT}} = -45\text{V}$	-100			$\mu\text{A}$
Input current	$I_{\text{IH1}}$	$V_{\text{IN}} = 10\text{V}$	0.6	0.9	1.3	mA
	$I_{\text{IH2}}$	$V_{\text{IN}} = 5\text{V}$	0.2	0.4	0.6	mA
	$I_{\text{IL}}$	$V_{\text{IN}} = 0\text{V}$	-30			$\mu\text{A}$
Supply current	$I_{\text{CCH}}$	Each input $V_{\text{IN}} = 10\text{V}$			3.0	mA
	$I_{\text{CCL}}$	Each input open			100	$\mu\text{A}$

## Equivalent Circuit and Pin Assignment



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