



LB1294

6-Channel Driver Array

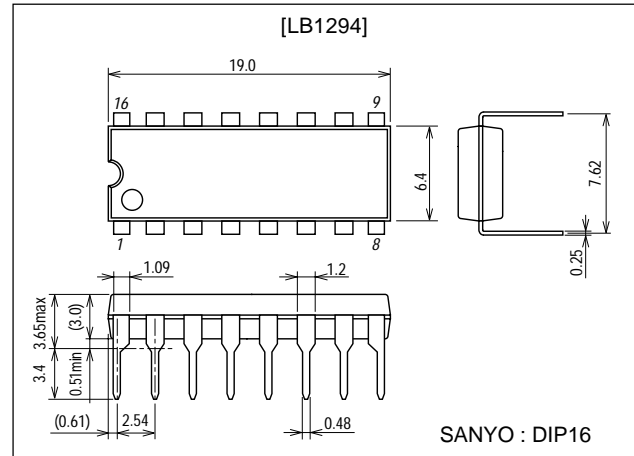
Features

- 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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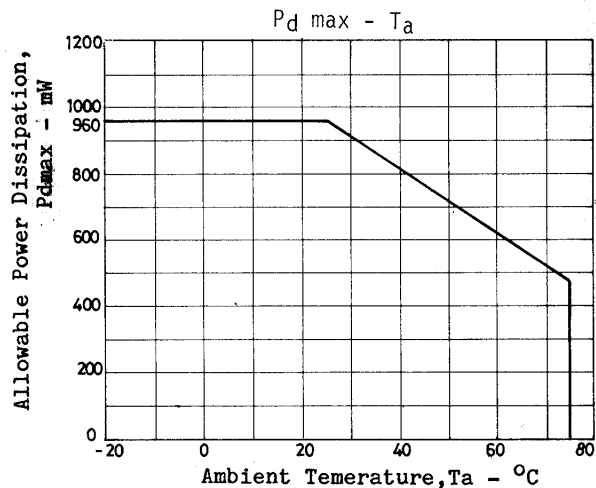
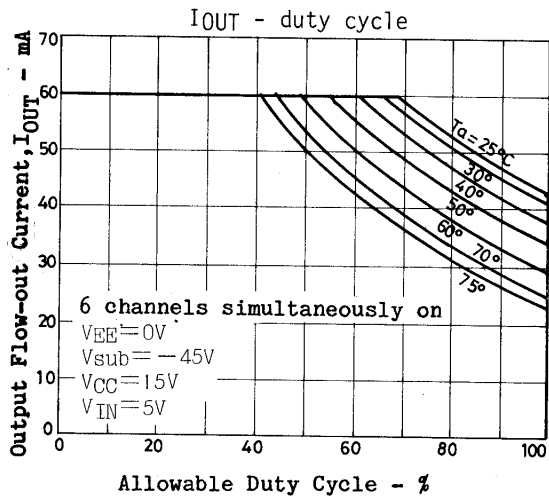
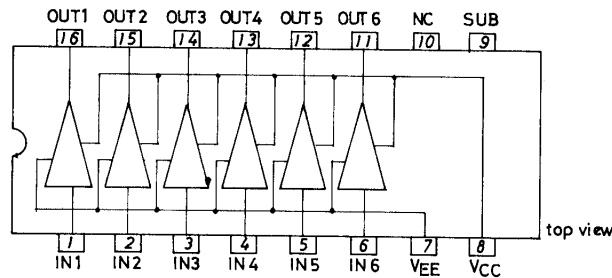
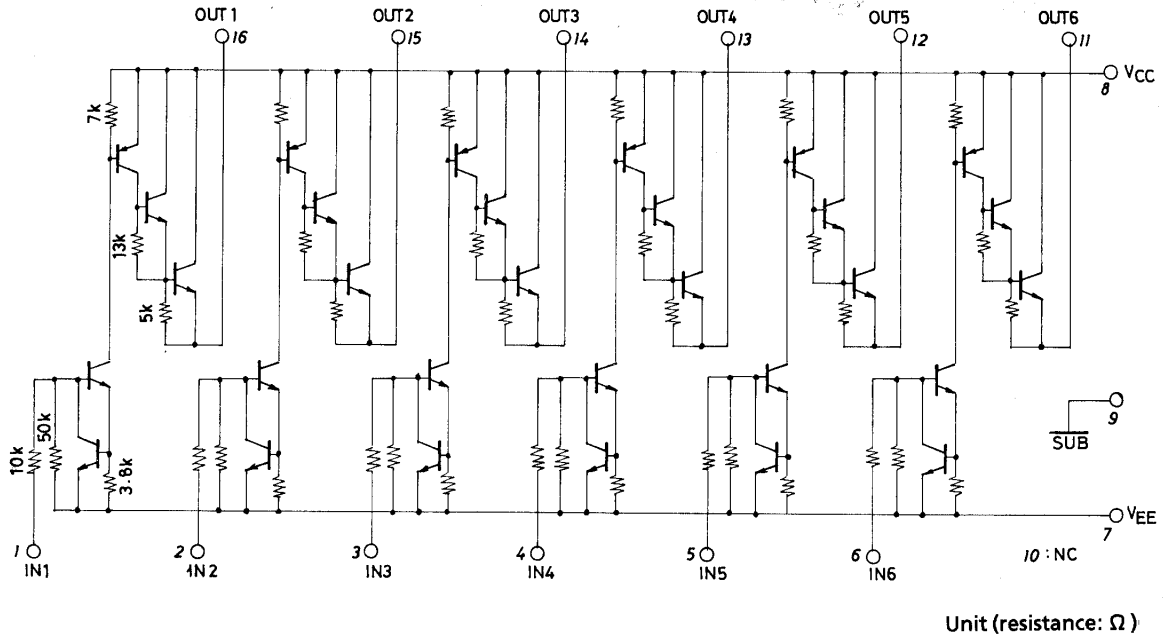
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LB1294

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_{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_{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_{OL}	$V_{\text{IN}} = 0.4\text{V}$, $V_{\text{OUT}} = -45\text{V}$	-100			μA
Input current	I_{IH1}	$V_{\text{IN}} = 10\text{V}$	0.6	0.9	1.3	mA
	I_{IH2}	$V_{\text{IN}} = 5\text{V}$	0.2	0.4	0.6	mA
	I_{IL}	$V_{\text{IN}} = 0\text{V}$	-30			μA
Supply current	I_{CCH}	Each input $V_{\text{IN}} = 10\text{V}$			3.0	mA
	I_{CCL}	Each input open			100	μA

Equivalent Circuit and Pin Assignment



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