



# **6-Channel Driver Array**

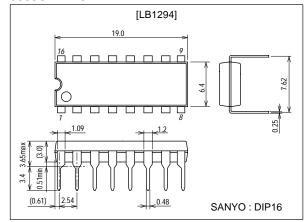
### **Features**

- 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 Ta = 25°C

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	Vcc	V <sub>CC</sub> -Sub	-0.3 to +60	V
Output supply voltage	Vout	OUT-Sub	−0.3 to V <sub>CC</sub>	V
V <sub>EE</sub> voltage range	VEE	V <sub>EE</sub> -V <sub>CC</sub> (Sub≤V <sub>EE</sub> ≤V <sub>CC</sub> )	0 to 30	V
Input supply voltage	V <sub>IN</sub>	IN-V <sub>EE</sub> (V <sub>IN</sub> ≤V <sub>CC</sub> )	0 to 30	V
Output current	lout		0 to 60	mA
Allowable power dissipation	Pd max		960	mW
Operating temperature	Topr		-20 to +75	°C
Storage temperature	Tstg		-40 to +150	°C

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

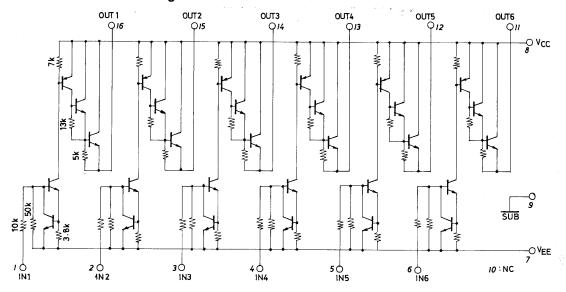
Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	Vcc		4.5 to 60	V
Input high-level voltage	VIH	I <sub>OUT</sub> =-60mA	V <sub>EE</sub> +2.2 to V <sub>EE</sub> +30	V
Input low-level voltage	$V_{IL}$	I <sub>OUT</sub> ≤–100μA	$V_{\mbox{\footnotesize EE}}$ =0.3 to $V_{\mbox{\footnotesize EE}}$ +0.4	V

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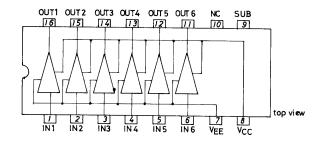
**Electrical Characteristics** at Ta = 25°C, Vsub=-45V,  $V_{EE}=0V$ ,  $V_{CC}=15V$ 

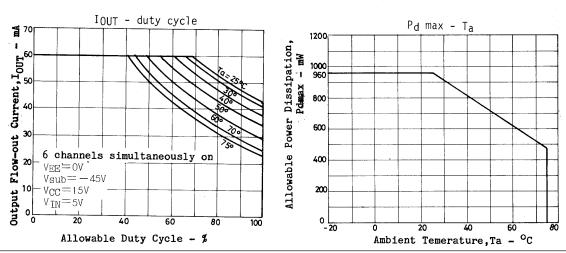
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offit
Output voltage	V <sub>OH1</sub>	V <sub>IN</sub> =10V, I <sub>OUT</sub> =–30mA	V <sub>CC</sub> -2.0	V <sub>CC</sub> -1.6		V
	V <sub>OH2</sub>	V <sub>IN</sub> =10V, I <sub>OUT</sub> =-60mA	V <sub>CC</sub> -2.6	V <sub>CC</sub> -1.9		V
Output leakage current	loL	V <sub>IN</sub> =0.4V, V <sub>OUT</sub> =-45V	-100			μΑ
Input current	I <sub>IH1</sub>	V <sub>IN</sub> =10V	0.6	0.9	1.3	mA
	I <sub>IH2</sub>	V <sub>IN</sub> =5V	0.2	0.4	0.6	mA
	IL	V <sub>IN</sub> =0V	-30			μΑ
Supply current	ICCH	Each input V <sub>IN</sub> =10V			3.0	mA
	<sup>I</sup> CCL	Each input open			100	μA

## **Equivalent Circuit and Pin Assignment**



Unit (resistance:  $\Omega$  )





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