

<b>SANYO</b>	NO.1831C	Monolithic Digital IC
		<b>LB1205</b>

**High-Voltage,  
High-Current Darlington Driver**

**Functions and Features**

- . 4-unit, high-voltage (65V), high-current (1.5A) Darlington driver
- . PNP input type (Low active)
- . On-chip spark killer diodes
- . On-chip input protection diodes
- . Capable of being driven directly from 5V-operated CMOS, TTL

**Absolute Maximum Ratings at Ta=25°C**

				unit
Maximum Supply Voltage	$V_{DDmax}$		7.0	V
	$V_{CCmax}$		62	V
Output Supply Voltage	$V_{o,max}$		65	V
Input Supply Voltage	$V_{INmax}$	$V_{IN} \geq Gnd$	$V_{DD}-7.0$ to $V_{DD}+10.0$	V
Output Current	$I_{o,max}$		1.5	A
Spark Killer Diode Forward Current	$I_{Fs}$		1.5	A
Allowable Power Dissipation	$P_{dmax}^*$		*1.9	W
Operating Temperature	$T_{opr}$		-20 to +75	°C
Storage Temperature	$T_{stg}$		-55 to +150	°C
		*Mounted on the recommended printed circuit board	2.6	W

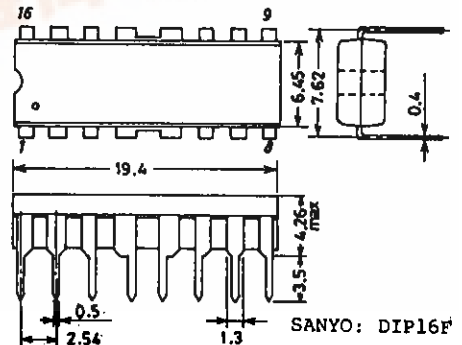
**Allowable Operating Conditions at Ta=25°C**

				unit
Supply Voltage Range	$V_{DD}$		3.0 to 7.0	V
Input "ON" Level Voltage	$V_{INon}$	$V_{IN} \geq Gnd, I_o=1.0A$	$V_{DD}-7.0$ to $V_{DD}-2.6$	V
Input "OFF" Level Voltage	$V_{INoff}$	$I_o \geq 30\mu A$	$V_{DD}-0.3$ to $V_{DD}+10.0$	V

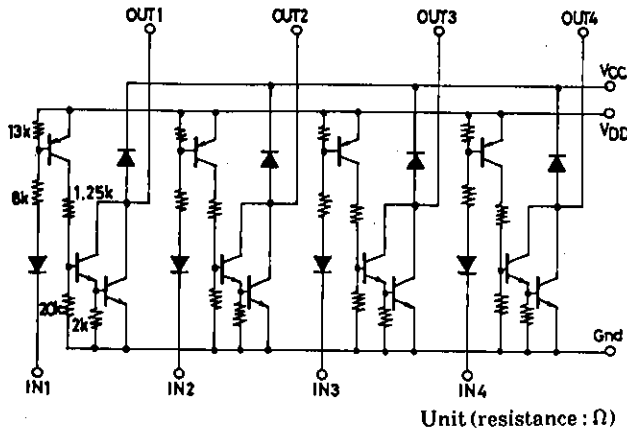
**Electrical Characteristics at Ta=25°C,  $V_{DD}=5.0V$**

			min	typ	max	unit
Output Saturation Voltage	$V_{osat1}$	$V_{IN}=V_{DD}-5.0V, I_o=0.5A$			1.2	V
	$V_{osat2}$	" , $I_o=1.0A$			1.5	V
	$V_{osat3}$	" , $I_o=1.5A$			2.0	V
Output Sustain Voltage	$V_{osus}$	$I_o=100mA$		65		V
Input Current	$I_{IN}$	$V_{DD}=7.0V, V_{IN}=V_{DD}-7.0V$			1.0	mA
Spark Killer Diode Forward Voltage	$V_{Fs}$	$I_{Fs}=1.5A$			3.0	V
Spark Killer Diode Reverse Current	$I_{Rs}$	$V_{CC}=62V, V_o=0V$			30	$\mu A$

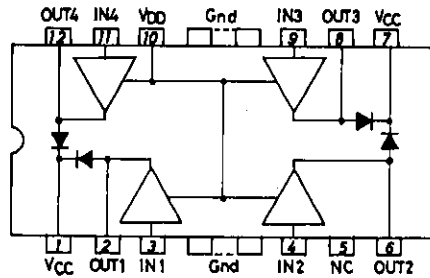
**Package Dimensions 3054A**  
(unit : mm)



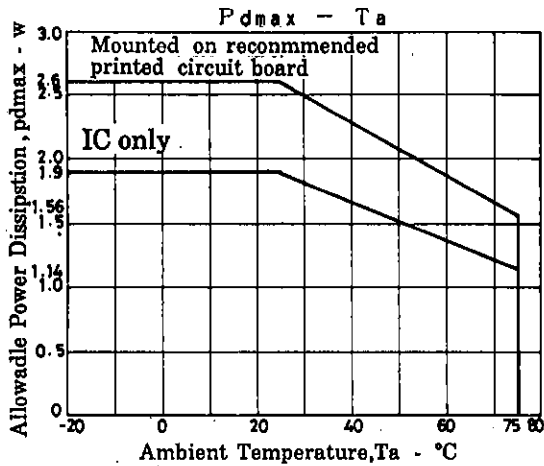
**Equivalent Circuit**



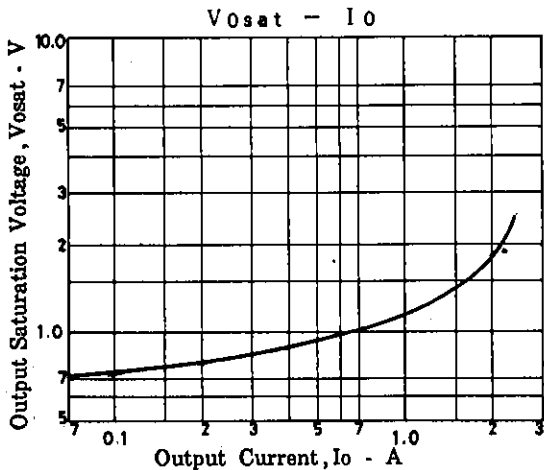
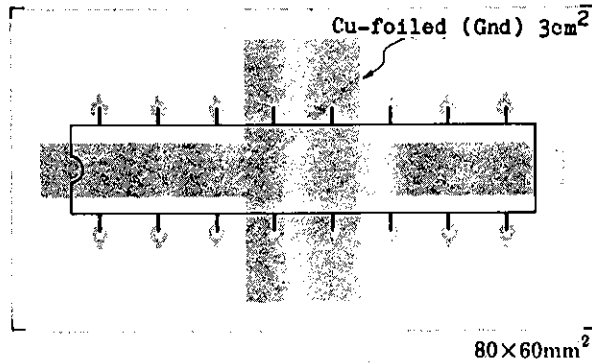
**Pin Assignment**



(Note) VCC (pins 1,9) is shorted internally.



**Recommended Printed Circuit Pattern**



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