

SANYO

NO.1831C

LB1205**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

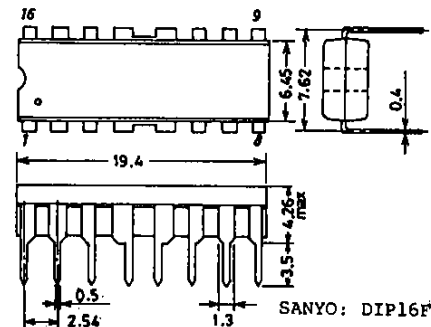
| | | | unit |
|------------------------------------|---|---|------|
| Maximum Supply Voltage | V_{DDmax} | 7.0 | V |
| | V_{CCmax} | 62 | V |
| Output Supply Voltage | $V_{o,max}$ | 65 | V |
| Input Supply Voltage | V_{INmax} | $V_{IN} \geq Gnd$ $V_{DD}-7.0$ to $V_{DD}+10.0$ | V |
| Output Current | $I_{o,max}$ | 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, $V_{DD}=5.0V$

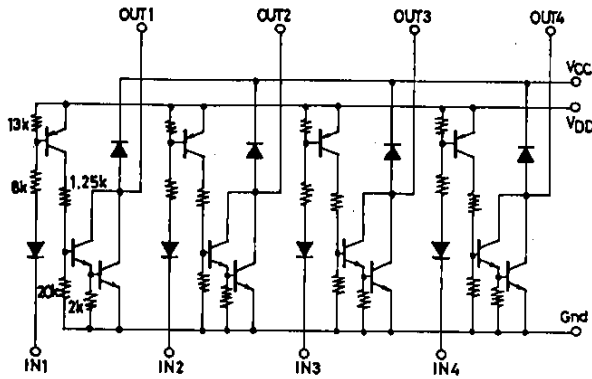
| | | | min | typ | max | unit |
|------------------------------------|-------------|-----------------------------------|-----|-----|-----|---------|
| Output Saturation Voltage | V_{osat1} | $V_{IN}=V_{DD}-5.0V, I_o=0.5A$ | | | 1.2 | V |
| | V_{osat2} | " , $I_o=1.0A$ | | | 1.5 | V |
| | V_{osat3} | " , $I_o=1.5A$ | | | 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 | μA |

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

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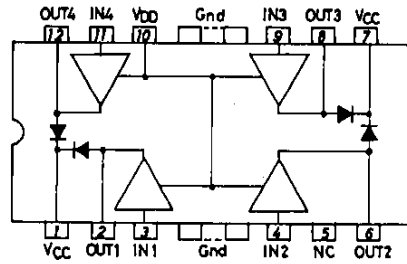
O1995YK/ 7097KI/ 6265KI/ D203KI,TS No.1831-1/2

Equivalent Circuit



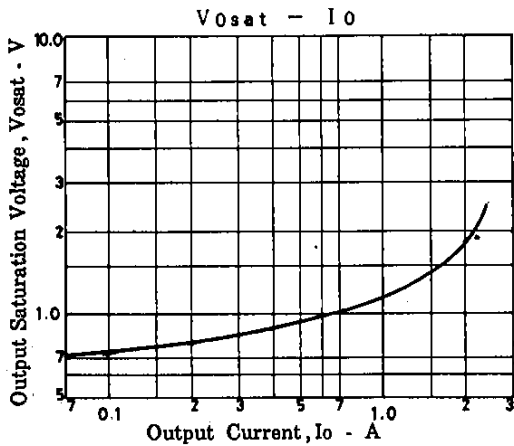
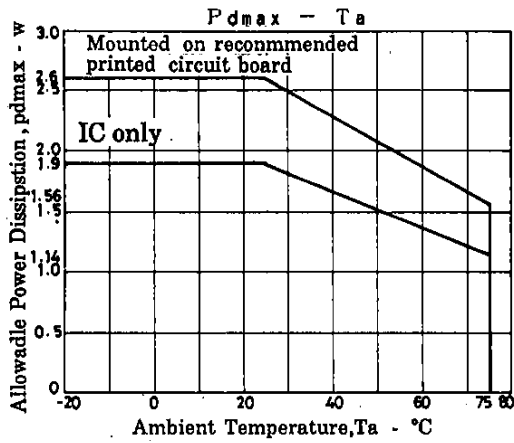
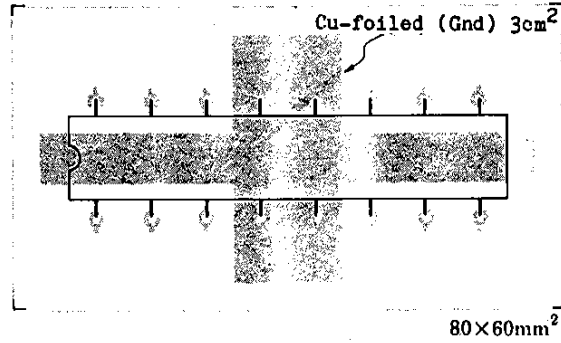
Unit (resistance : Ω)

Pin Assignment



(Note) V_{CC} (pins 1,9) is shorted internally.

Recommended Printed Circuit Pattern



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