

SANYO

NO.1903D

LB1235**High-Voltage,
High-Current Darlington Driver****Functions and Features**

- . 4-channel, high-voltage (65V), high-current (1.5A) Darlington driver
- . On-chip spark killer diodes
- . Capable of being direct driven with 5V-operated TTL
- . NPN input high-active type

Absolute Maximum Ratings at Ta=25°C

			unit
Maximum Supply Voltage	V_{CCmax}	65	V
Output Supply Voltage	V_{OUT}	65	V
Input Supply Voltage	V_{IN}	15	V
Output Current	I_{OUT}	1.5	A
Spark Killer Diode Forward Current	$I_{F(S)}$	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 : 2.6W

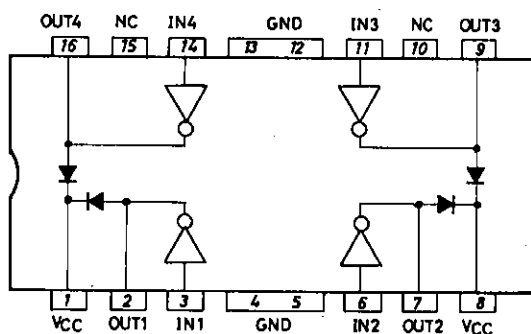
Allowable Operating Conditions at Ta=25°C

			unit
Output Supply Voltage	V_{OUT}	65	V
Input "H" Level Voltage	V_{IH}	$I_{OUT}=1.0A$ 2.0 to 15	V
Input "L" Level Voltage	V_{IL}	$I_{OUT}=30\mu A$ -0.3 to +0.3	V

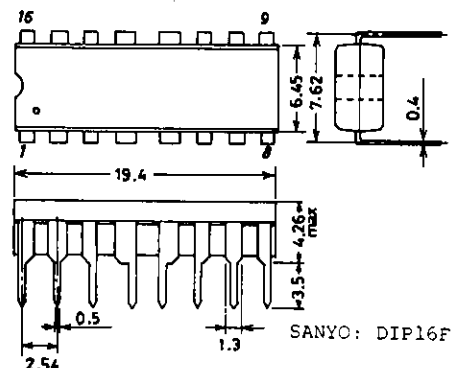
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Output Saturation Voltage	$V_o(sat1)$	$V_{IN}=5.0V, I_{OUT}=0.5A$			1.2	V
	$V_o(sat2)$	$V_{IN}=5.0V, I_{OUT}=1.0A$			1.5	V
	$V_o(sat3)$	$V_{IN}=5.0V, I_{OUT}=1.5A$			2.0	V

Continued on next page.

Pin Assignment

(Note) V_{CC} (Pin 1 and 6) is shorted internally.
Do not use NC pin.

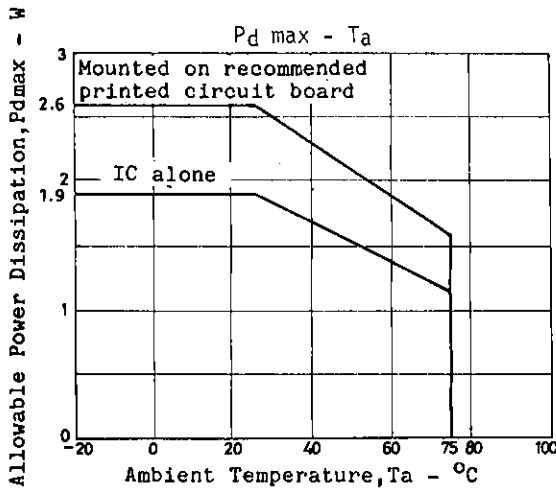
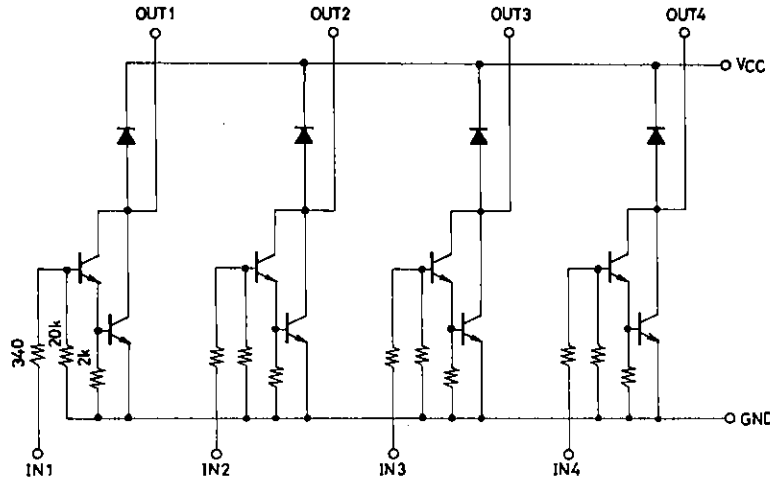
**Package Dimensions 3054A-D16FIC
(unit : mm)**

Continued from preceding page.

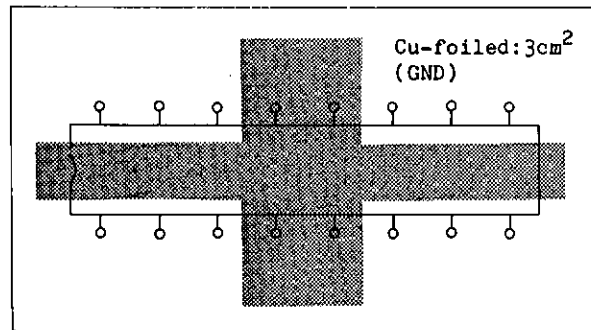
			min	typ	max	unit
Output Sustain Voltage	$V_{O(sus)}$	$I_{OUT}=100mA$	65			V
Input Current	I_{IN}	$V_{IN}=5.0V$		11	15	mA
Spark Killer Diode Forward Voltage	$V_{F(s)}$	$I_{F(s)}=1.5A$			3.0	V
Spark Killer Diode Reverse Current	$I_{R(s)}$	$V_{CC}=65V, V_{OUT}=0V$			30	μA

Equivalent Circuit

Unit (resistance: Ω)



Recommended Printed Circuit Pattern
(Bottom View) Board (80 x 60mm²)



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
 - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
 - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.