

SANYO	NO.1903D	Monolithic Digital IC
		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

Maximum Supply Voltage	V_{CCmax}	65	V	unit
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

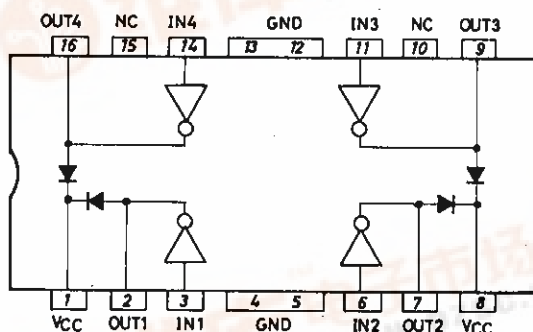
Output Supply Voltage	V_{OUT}	65	V	unit
Input "H" Level Voltage	V_{IH}	2.0 to 15	V	$I_{OUT} \leq 1.0A$
Input "L" Level Voltage	V_{IL}	-0.3 to +0.3	V	$I_{OUT} \leq 30\mu A$

Electrical Characteristics at Ta=25°C

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

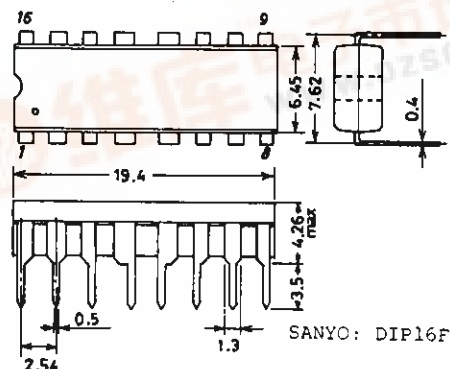
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Pin Assignment



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

Package Dimensions 3054A-D16FIC (unit : mm)



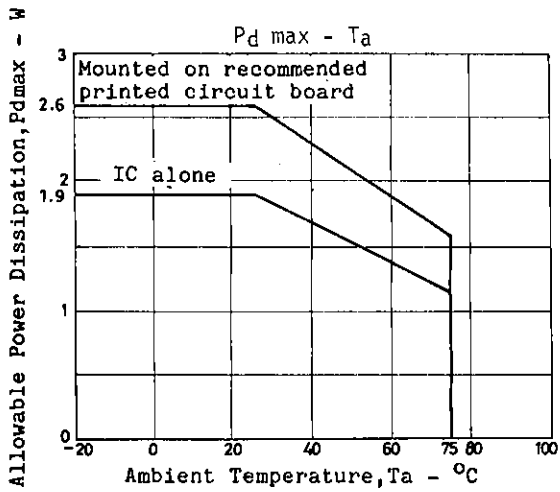
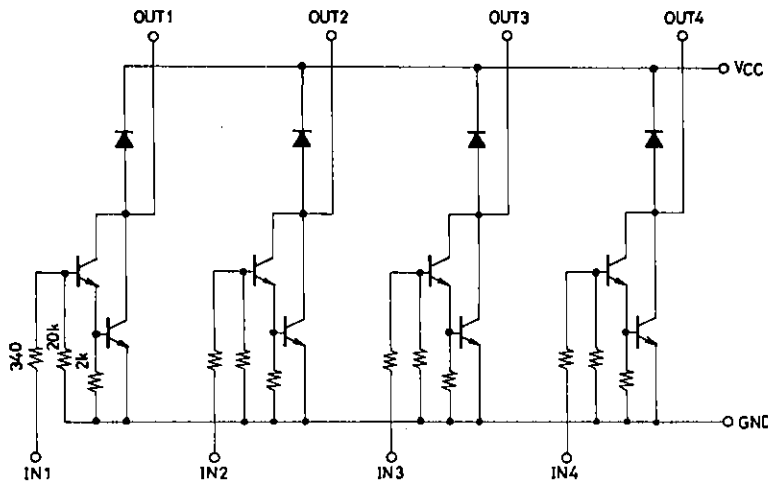
LB1235

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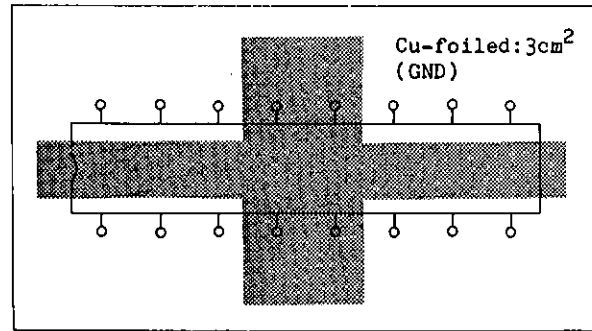
			min	typ	max	unit
Output Sustain Voltage	$V_{O(sus)}$	$I_{OUT}=100mA$	65			V
Input Current	I_{IN}	$V_{IN}=5.0V$		11	15	mA
Spark Killer Diode Forward Voltage	$V_{F(s)}$	$I_{F(s)}=1.5A$			3.0	V
Spark Killer Diode Reverse Current	$I_{R(s)}$	$V_{CC}=65V, V_{OUT}=0V$			30	μA

Equivalent Circuit

Unit (resistance: Ω)



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



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