

No.3298

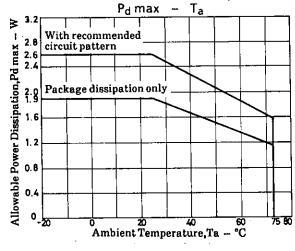
LB1730

High-Voltage, High-Current, Darlington Driver

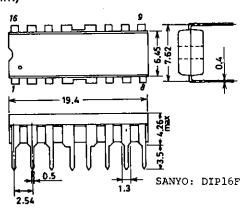
Functions and Features

- · Four independent high-voltage (85V), high-current (1.5A) Darlington driver
- · On-chip spark killer diode
- · Capable of being operated direct by 5V TTL
- · NPN input high-active type

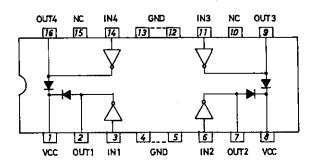
Absolute Maximum Ratings at Ta = 25°C						unit
Maximum Supply Voltage	V _{CC} max				85	V
Applied Output Voltage	V_{OUT}		•		85	V
Applied Input Voltage	V_{IN}				15	V
Output Current	I _{OUT}				1.5	Α
Spark Killer Diode	IFS				1.5	Α
Forward Current						
Allowable Power Dissipation	Pd max	(With recommended circuit board pattern: 2.6W) 1.9			W	
Operating Temperature	Topr	-20 to +75			°C	
Storage Temperature	Tstg	- 55 to +150			°C	
Allowable Operating Conditions at Ta = 25°C						unit
Applied Output Voltage	v_{out}				85	V
Input ON-Level Voltage	V _{IN} on	$I_{OUT} = 1.0A$	2.0 to 15			V
Input OFF-Level Voltage	V_{IN} off	$I_{OUT} \le 30 \mu A$	-0.3 to +0.3			V
Electrical Characteristics at Te		min	typ	max	unit	
Output Saturation Voltage	V_0 sat 1	$V_{IN} = 5.0 V, I_{OUT} = 0.5 A$			1.2	V
	V_0 sat2	$V_{IN} = 5.0V, I_{OUT} = 1.0A$			1.5	V
	V_0 sat 3	$V_{IN} = 5.0 V, I_{OUT} = 1.5 A$			2.0	V
Output Sustain Voltage	V_0 sus	$I_{OUT} = 100 \text{mA}$	85			V
Input Current	I_{IN}	$V_{IN} = 5.0V$		11	15	mΑ
Spark Killer Diode	V_{FS}	$I_{FS}=1.5A$			3.0	V
Forward Voltage						
Spark Killer Diode Reverse Current	I _{RS}	$V_{\rm CC} = 85 \text{V}, V_{\rm OUT} = 0 \text{V}$			30	μΑ



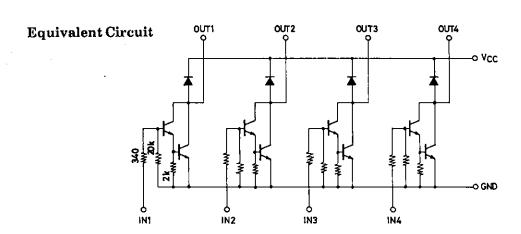
Package Dimensions 3054A-D16FIC (unit:mm)



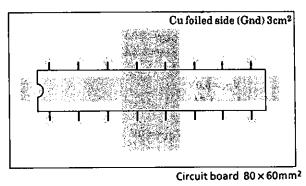
Pin Assingnment



Note) - V_{CC} (pins 1 and 8) are shorted internally - Do not use NC pin.



Sample Printed Pattern Circuit



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