

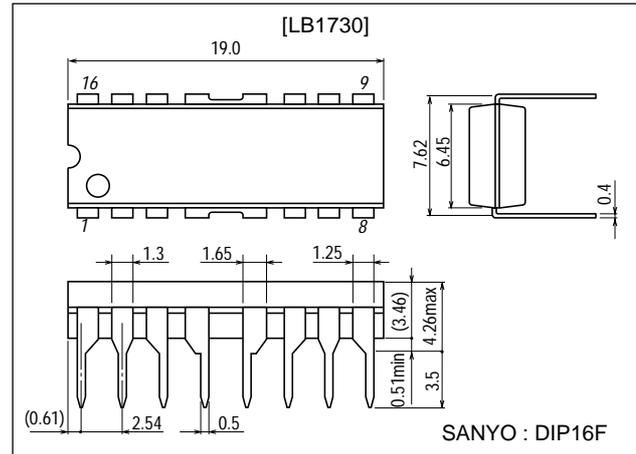
**LB1730****High-Voltage, High-Current, Darlington Driver****Functions and Features**

- Four-channel 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.

Package Dimensions

unit:mm

3054B-DIP16F

**Specifications****Absolute Maximum Ratings** at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	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	A
Spark killer diode forward current	I_{FS}		1.5	A
Allowable power dissipation	$P_d\ max$	(With recommended circuit board pattern : 2.6W)	1.9	W
Operating temperature	T_{opr}		-20 to +75	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to +150	$^\circ\text{C}$

Allowable Operating Ranges at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	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	$V_{IN\ off}$	$I_{OUT}\leq 30\mu A$	-0.3 to +0.3	V

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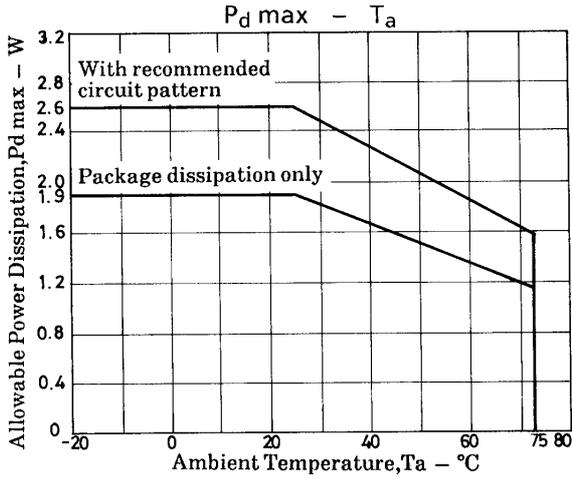
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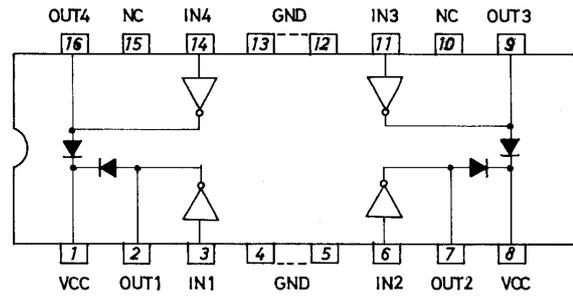
LB1730

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Output saturation voltage	$V_{O\ sat1}$	$V_{IN}=5.0\text{V}, I_{OUT}=0.5\text{A}$			1.2	V
	$V_{O\ sat2}$	$V_{IN}=5.0\text{V}, I_{OUT}=1.0\text{A}$			1.5	V
	$V_{O\ sat3}$	$V_{IN}=5.0\text{V}, I_{OUT}=1.5\text{A}$			2.0	V
Output sustain voltage	$V_{O\ sus}$	$I_{OUT}=100\text{mA}$	85			V
Input current	I_{IN}	$V_{IN}=5.0\text{V}$		11	15	mA
Spark killer diode forward voltage	V_{FS}	$I_{FS}=1.5\text{A}$			3.0	V
Spark killer diode reverse current	I_{RS}	$V_{CC}=85\text{V}, V_{OUT}=0\text{V}$			30	μA

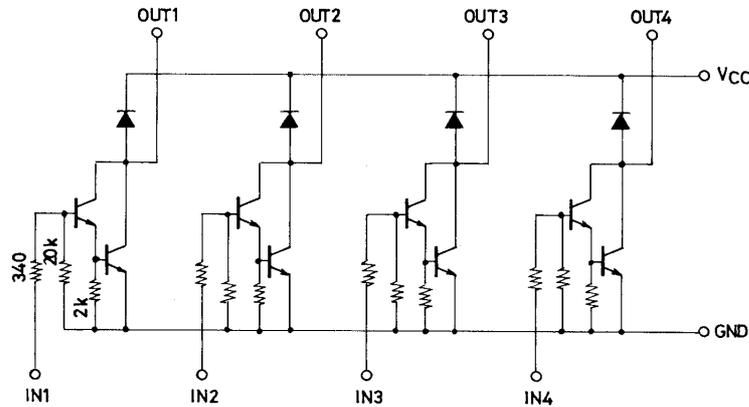


Pin Assingment

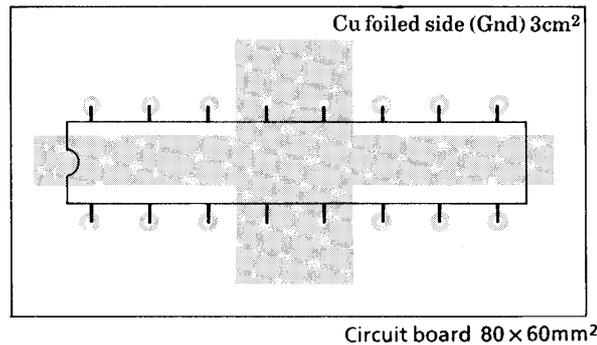


Note) · V_{CC} (pins 1 and 8) are shorted internally.
· Do not use NC pin.

Equivalent Circuit



Sample Printed Pattern Circuit



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