

SANYO

NO.2845A

LB1745**Octal High-Voltage, Current-Source Output Driver****Overview**

The LB1745 is an octal high-voltage current source output driver with active-low inputs. High output drive capability for low input current is achieved with NPN Darlington-pair output drivers.

The LA1745 sources up to 500mA from each driver at supply voltages of up to 50V. It is available in 18-pin plastic DIPs.

Features

- Eight independent Darlington-pair driver circuits
- High-voltage, high-current source
- Output clamp diodes
- Input protection diodes

Maximum Ratings at Ta = 25°C

			unit
Maximum Supply Voltage	V_{CC} max	-0.3 to +50	V
Applied Output Voltage	V_{OUT}	-0.3 to V_{CC}	V
Applied Input Voltage	V_{IN}	-0.3 to V_{CC}	V
Maximum Output Current	I_{OUT} Per driver	-500	mA
Clamp Diode Forward Current	I_F	-500	mA
Clamp Diode Reverse Voltage	V_R	-0.3 to +50	V
Allowable Power Dissipation	P_d max	1.13	W
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-40 to +150	°C

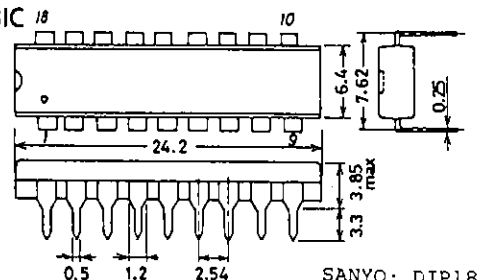
Allowable Operating Conditions at Ta = 25°C

			unit
Power Supply Voltage Range	V_{CC}	4 to 50	V
Input ON-level Voltage	V_{ION} $I_{OUT} = -350$ mA	0 to $V_{CC} - 2.5$	V
Input OFF-level Voltage	V_{IOFF} $I_{OUT} \geq -50$ μA	$V_{DD} - 0.7$ to V_{CC}	V

Electrical Characteristics at Ta = 25°C, $V_{CC} = 5.0$ V

			min	typ	max	unit
Power Supply Current	I_{CCH} All inputs with $V_{IN} = V_{CC} - 3.6$ V			3.8	6	mA
	I_{CCL} All inputs open				100	μA
Output Voltage	V_{OH1} $V_{IN} = V_{CC} - 2.5$ V, $I_{OUT} = -100$ mA	$V_{CC} - 2.0$		$V_{CC} - 1.45$		V
	V_{OH2} $V_{IN} = V_{CC} - 2.5$ V, $I_{OUT} = -350$ mA	$V_{CC} - 2.4$		$V_{CC} - 1.6$		V
Input Current	I_{IN1} $V_{IN} = V_{CC} - 3.6$ V		-0.5	-0.31		mA
	I_{IN2} $V_{IN} = V_{CC} - 15$ V		-3.0	-1.9		mA
Clamp Diode Forward Voltage	V_F $I_F = -350$ mA		-2.4	-1.2		V
Clamp Diode Reverse Voltage	V_R $I_R = 100$ μA		50			

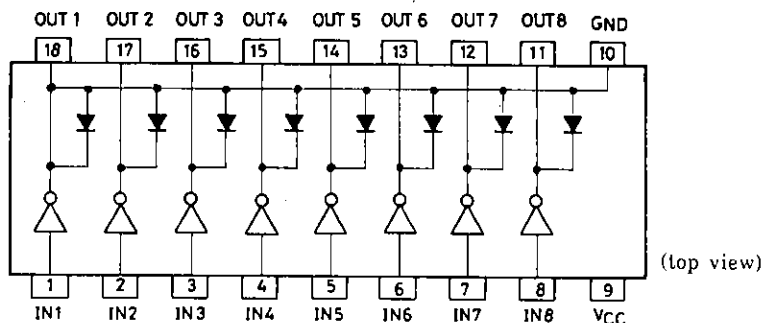
Package Dimensions 3007A-D18IC
(unit : mm)



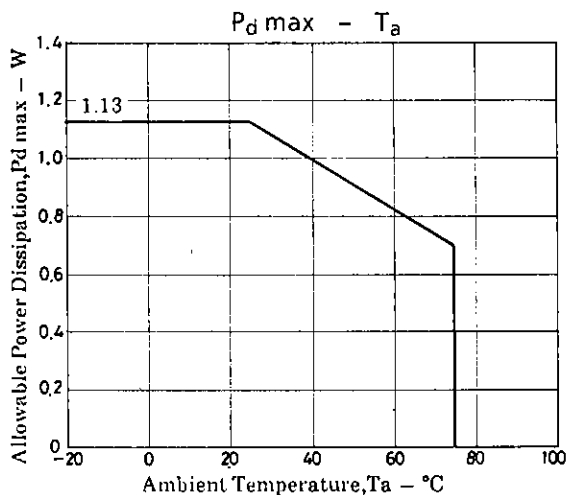
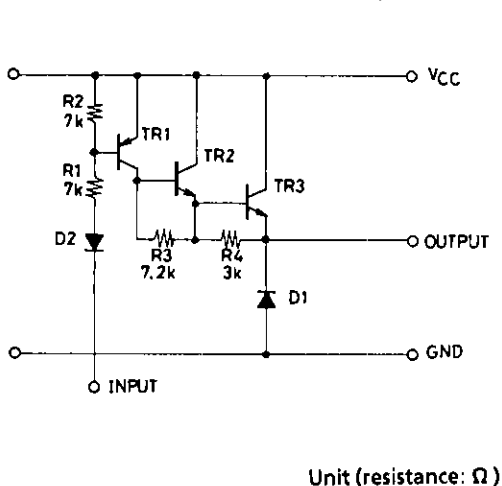
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LB1745

Pin Assignment



Equivalent Circuit (For 1 channel)



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