



LB1292

6-Channel Driver Array

Overview

The LB1292 is designed for interfacing low level devices with fluorescent display tube. 6 independent Darlington output stages can be used to driver digits or segments. With pull-down equivalent resistor built in, no external resistor to prevent ghost is required. When input voltage is at low level, output becomes active.

Features

- 6 independent Darlington drivers.
- Capable of driving digits or segments.
- On-chip sink current circuit for pull-down.
- Rated at 55V/25mA.

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Maximum supply voltage	$V_{CC\ max}$		-0.3 to +55.0	V
Output supply voltage	V_{OUT}		-0.3 to V_{CC}	V
Input supply voltage	V_{IN}		-0.3 to +20.0	V
Maximum output current	I_{OUT}		30	mA
Allowable power dissipation	$P_d\ max$		960	mW
Operating temperature	T_{opr}		-20 to +75	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^\circ\text{C}$

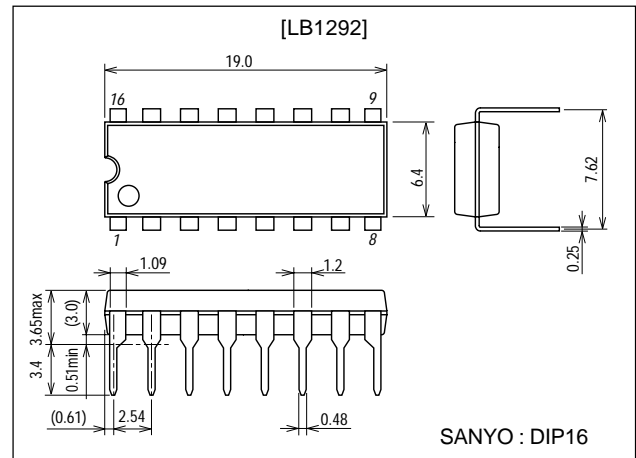
Allowable Operating Ranges at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Supply voltage	V_{CC}		4.75 to 55.0	V
Input high-level voltage	V_{IH}	$I_{OUT} = -30\text{mA}$	2.6 to 20.0	V
Input low-level voltage	V_{IL}	$I_{OUT} \leq -30\mu\text{A}$	-0.3 to +0.3	V

Package Dimensions

unit:mm

3006C-DIP16



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SANYO Electric Co., Ltd. Semiconductor Company

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

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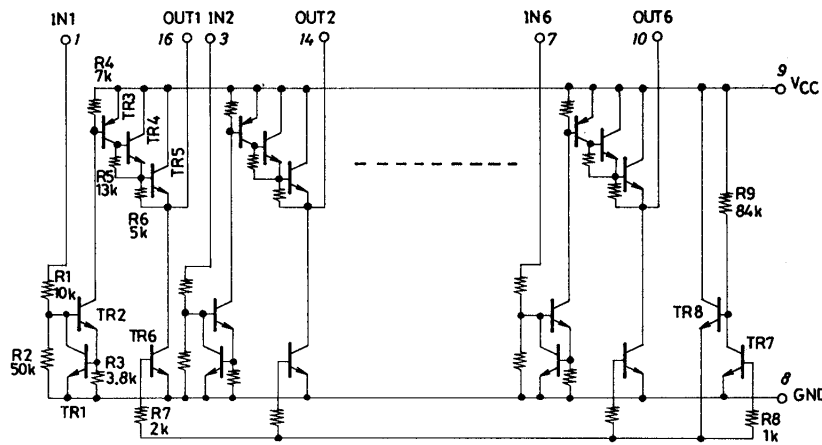
LB1292

Electrical Characteristics at $T_a = 25^\circ\text{C}$, $V_{CC}=55\text{V}$

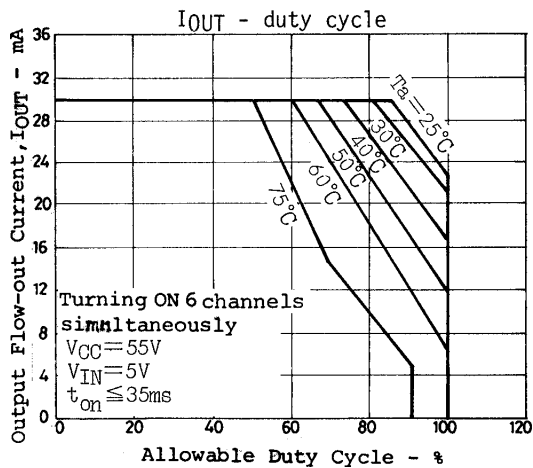
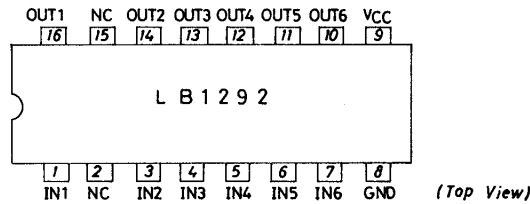
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Current drain	I_{CCH}	All inputs, $V_{IN}=10\text{V}$		5.0	8.0	mA
	I_{CCL}	All inputs open	0.3	1.0	1.6	mA
Output voltage	V_{OH}	$V_{IN}=10\text{V}$, $I_{OUT}=-30\text{mA}$	$V_{CC}-2.0$	$V_{CC}-1.6$		V
	V_{OL}	$V_{IN}=0.3\text{V}$, $I_{OUT}=0\text{mA}$			200	mV
Output leakage current	I_{OL}	$V_{IN}=0.3\text{V}$, $V_{OUT}=0.5\text{V}$	-30			μA
Pull-down current	I_{OPL}	$V_{OUT}=V_{CC}$	0.2	0.4	1.0	mA
Input current	I_{IN1}	$V_{IN}=10\text{V}$	0.6	0.9	1.3	mA
	I_{IN2}	$V_{IN}=5\text{V}$	0.2	0.4	0.6	mA
	I_{INL}	$V_{IN}=0\text{V}$	-30			μA

Equivalent Circuit

Unit (resistance: Ω)



Pin Assignment



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