

SANYO

No.843E

LB1240**Fluorescent Display Tube Driver**

The LB1240 has been designed for interfacing low-level digital devices to fluorescent display tubes. Its 8-circuit independent Darlington output stage is used for digit and segment drivers. Equivalent pull-down resistors are built in; externally connected resistors to prevent ghosts are no longer required. Output is activated when input voltages are at a low level, making the IC an ideal interface for N-channel MOS devices.

FEATURES

- 8 circuit independent Darlington driver.
- Capable of driving digits or segments.
- Built-in pull-down sink current.
- Rated at 55 V/30 mA

ABSOLUTE MAXIMUM RATINGS/ $T_a = 25^\circ\text{C}$

			unit
Maximum power supply voltage	V_{CC} max	$-0.3 \sim +55.0$	V
Output supply voltage	V_{OUT}	$-0.3 \sim V_{CC}$	V
Input supply voltage	V_{IN} $V_{IN} > \text{GND}$	$V_{CC} - 10 \sim V_{CC}$	V
Maximum output current	I_{OUT}	-30	mA
Allowable power dissipation	P_d max	1.13	W
Operating ambient temperature	T_{opr}	$-20 \sim +75$	$^\circ\text{C}$
Storage ambient temperature	T_{stg}	$-40 \sim +150$	$^\circ\text{C}$

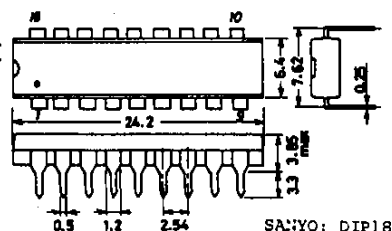
ALLOWABLE OPERATING CONDITIONS/ $T_a = 25^\circ\text{C}$

			unit
Power supply voltage	V_{CC}	$4.75 \sim 55.0$	V
Input (H) level voltage	V_{IH} $V_{IN} > \text{GND},$ $I_{OUT} = -30 \text{ mA}$	$V_{CC} - 10 \sim V_{CC} - 2.8$	V
Input (L) level voltage	V_{IL} $I_{OUT} \leq -30 \mu\text{A}$	$V_{CC} - 0.45 \sim V_{CC}$	V

ELECTRICAL CHARACTERISTICS/ $T_a = 25^\circ\text{C}, V_{CC} = 55 \text{ V}$

			min	typ	max	unit
Power supply current	I_{CCH} All inputs, $V_{IN} = V_{CC} - 10 \text{ V}$			5.0	8.0	mA
	I_{CCL} All inputs open		0.3	1.0	1.6	mA
Output voltage	V_{OH} $V_{IN} = V_{CC} - 10 \text{ V},$ $I_{OUT} = -30 \text{ mA}$	$V_{CC} - 2.0$	$V_{CC} - 1.6$			V
	V_{OL} $V_{IN} = V_{CC} - 0.3 \text{ V},$ $I_{OUT} = 0 \text{ mA}$				200	mV
Output leakage current	I_{OL} $V_{IN} = V_{CC} - 0.3 \text{ V}, V_{OUT} = 0.5 \text{ V}$	-30				μA
Pull-down current	I_{OPL} $V_{OUT} = V_{CC}$	0.2	0.4	1.0		mA
Input current	I_{INH} $V_{IN} = V_{CC} - 10 \text{ V}$	0.6	0.9	1.3		mA

Package Dimensions 3007A-D18IC
(unit : mm)

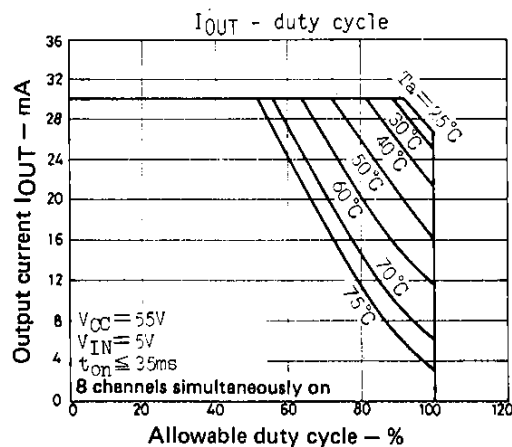
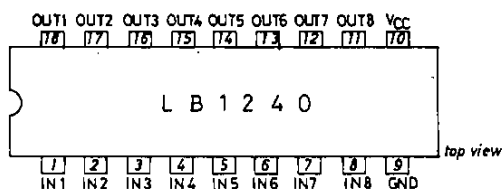
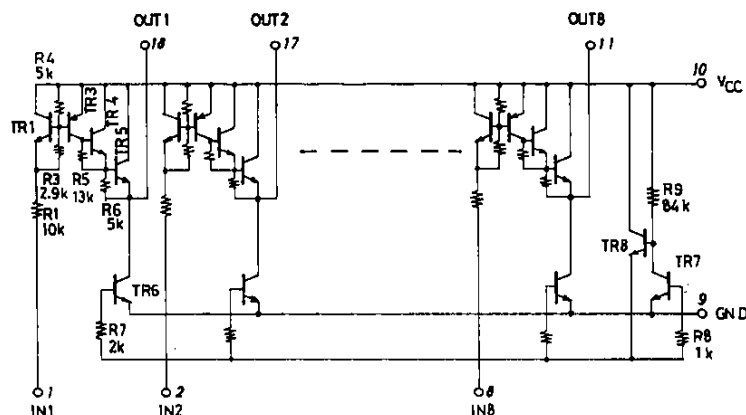


SANYO Electric Co., Ltd. Semiconductor Business Headquarters

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

7067KI / 7315KI / 7223KI / N111KI No.843-1/2

Equivalent circuit and pin assignment

Unit (resistance: Ω)

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