Ordering number: EN 842F

Monolithic Digital IC

NO.842F

LB1290

8-Channel Driver Array

The LB1290 has been designed for interfacing between low level digital devices and fluorescent display tubes. Its 8-channel independent Darlington output stage is used for digit or segment drivers. Also, with pull-down equivalent resistors, no externally connected resistors are required for ghost prevention. When the input voltage is at a high level, the output gets activated.

FEATURES

- 8-channel independent Darlington driver
- Capable of driving digits or segments
- On-chip sink current circuit for pull-down
- 55 V/30 mA rating

ABSOLUTE MAXIMUM RATINGS/T_a = 25°C

			unit
Maximum power supply voltage	V_{CC} max	−0.3 ~ +55.0	V
Output supply voltage	V_{OUT}	−0.3 ~ V_{CC}	V
Input supply voltage	V_{IN}	−0.3 ~ +20.0	V
Maximum output current	I_{OUT}	30	mA
Allowable power dissipation	P_d max	1.13	W
Operating ambient temperature	Topr	−20 ~ +75	°C
Storage ambient temperature	T_{stg}	−40 ~ +150	°C

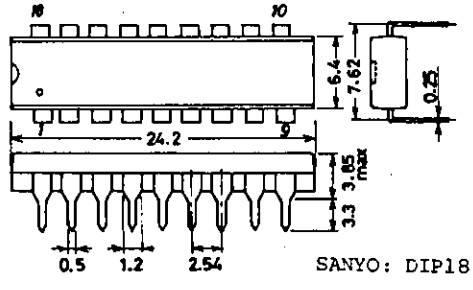
ALLOWABLE OPERATING CONDITIONS/T_a = 25°C

				unit
Supply voltage	V_{CC}		4.75 ~ 55.0	V
Input H level voltage	V_{IH}	I_{OUT} = −30 mA	2.6 ~ 20.0	V
Input L level voltage	V_{IL}	$I_{OUT} \leqq$ −30 μA	−0.3 ~ + 0.3	V

ELECTRICAL CHARACTERISTICS/T_a = 25°C, V_{CC} = 55 V

			min	typ	max	unit
Supply current	I_{CCH}	All inputs, V_{IN} = 10 V		6.0	10.0	mA
	I_{CCL}	All inputs open	0.3	1.0	1.6	mA
Output voltage	V_{OH}	V_{IN} = 10 V, I_{OUT} = −30 mA	V_{CC}-2.0	V_{CC}-1.6		V
	V_{OL}	V_{IN} = 0.3 V, I_{OUT} = 0 mA			200	mV
Output leakage current	I_{OL}	V_{IN} = 0.3 V, V_{OUT} = 0.5 V	−30			μA
Pull-down current	I_{OPL}	V_{OUT} = V_{CC}	0.2	0.4	1.0	mA
Input current	I_{IN} (1)	V_{IN} = 10 V	0.6	0.9	1.3	mA
	I_{IN} (2)	V_{IN} = 5 V	0.2	0.4	0.6	mA
	I_{INL}	V_{IN} = 0 V	−30			μA

Package Dimensions 3007A-D18IC
(unit : mm)



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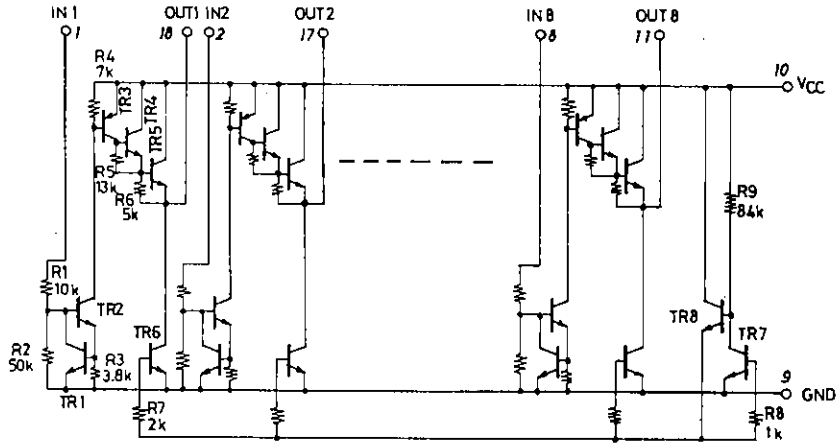
EQUIVALENT CIRCUIT AND PIN ASSIGNMENT



Unit (resistance: Ω)