

SANYO

NO.667B

LB1273R

6-Unit, Darlington Transistor Array

The circuit construction of this IC is a Darlington transistor array with six units, most suitable for printer hammer drive, lamp, and relay drive. With built-in protective diodes against negative inputs, it is advantageous in designing drive circuits for printey calculators and cash registers.

Features

- Since six units are included, it is suitable for 18-digit printers.
- The load current is considerably large i.e., 230mA and is, thus, suitable for thermal printers.

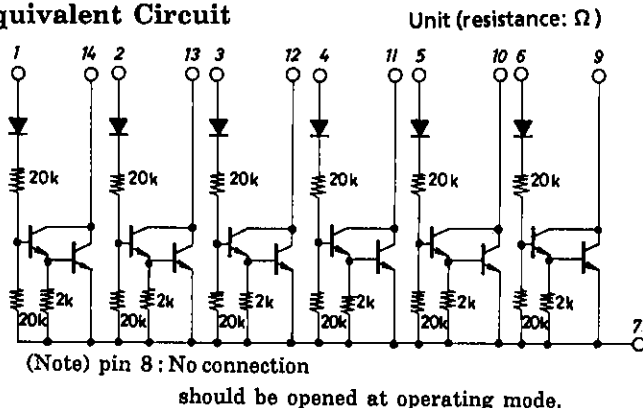
Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Value	Unit
Output Supply Voltage	V _{OUT}	-0.3 to +20	V
Input Supply Voltage	V _{IN}	-40 to +20	V
Output Inflow Current	I _{OUT}	per unit 150	mA
Instantaneous Output Inflow Current	i _{op}	per unit duty=60% pulse width < 2ms 230	mA
GND Pin Inflow Current	I ₇	-700	mA
GND Pin Instantaneous Outflow Current	I _{7p}	duty=60% pulse width < 2ms 1.4	A
Allowable Power Dissipation	P _{d max}	1.15	W
Instantaneous Allowable Power Consumption		Pulse width must be less than 2 msec. The percentage of all of 6 units being ON must be less than 50% for 100ms. 2.3	W
Junction Temperature	T _j	125	°C
Operating Temperature	T _{opr}	-20 to +70	°C
Storage Temperature	T _{stg}	-40 to +125	°C

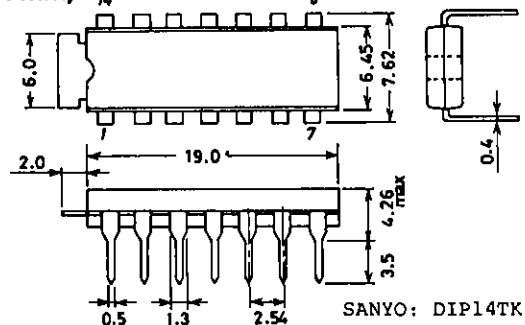
Allowable Operating Conditions at Ta = 25°C

Parameter	Symbol	Value	Unit
Output Supply Voltage	V _{OUT}	20	V
Input 'H' Level Voltage	V _{IH}	output terminal current = 150mA 15 to 20	V
Input 'L' Level Voltage	V _{IL}	output terminal current = 100uA -35 to +1	V
Load Resistance	R _L	No inductance components should be included. 80 (min)	ohm

Equivalent Circuit

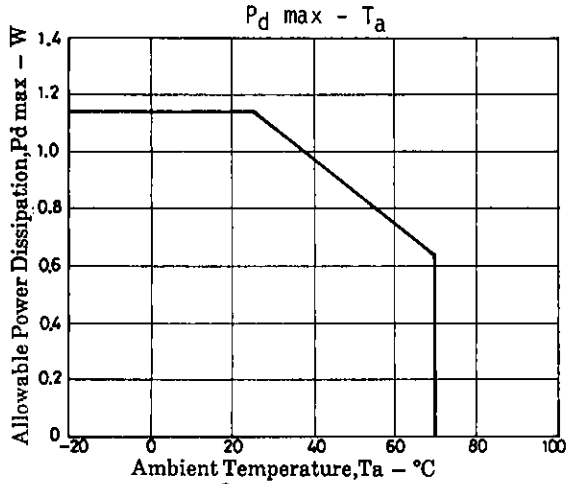


Package Dimensions 3004A-D14TKIC (unit : mm)



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

			min	typ	max	unit
Output Voltage	$V_{\text{OUT}(1)}$	$V_{\text{IN}}=15\text{V}, I_{\text{OUT}}=230\text{mA}$			1.7	V
Output Voltage	$V_{\text{OUT}(2)}$	$V_{\text{IN}}=15\text{V}, I_{\text{OUT}}=150\text{mA}$			1.5	V
Output Leak Current	I_{off}	$V_{\text{IN}}=1.0\text{V}, V_{\text{OUT}}=20\text{V}$			100	μA
Input Current	I_{IN}	$V_{\text{IN}}=18\text{V}$			1.8	mA
Output Current	I_{OUT}	$I_{\text{IN}}=0.5\text{mA}, V_{\text{OUT}}=1.5\text{V}$	150			mA
Input Leak Current	I_{leak}	$V_{\text{IN}}=-35\text{V}$	-10			μA



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