Ordering number: EN 667B

Monolithic Digital IC

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 suitadle 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

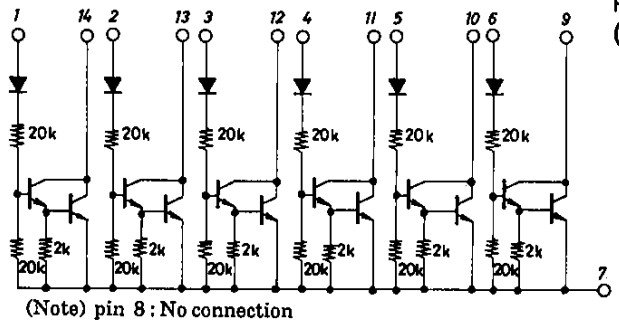
				unit
Output Supply Voltage	V_{OUT}		−0.3 to +20	V
Input Supply Voltage	V_{IN}		−40 to +20	V
Output Inflow Current	I_{OUT}	per unit	150	mA
Instantaneous Output Inflow Current	iop	per unit duty = 60% pulse width (2ms	230	mA
GND Pin Inflow Current	I_7		−700	mA
GND Pin Instantaneous Outflow Current	I_7p	duty = 60% pulse width (2ms	1.4	A
Allowable Power Dissipation	Pd max		1.15	W
Instan taneous 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	Tj		125	°C
Operating Temperature	Topr		−20 to +70	°C
Storage Temperature	Tstg		−40 to +125	°C

Allowable Operating Conditions at Ta = 25°C

				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	ohm (min)

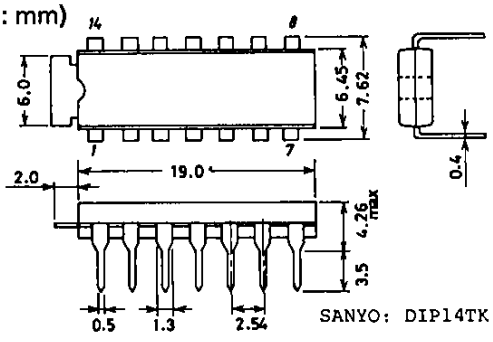
Equivalent Circuit

Unit (resistance: Ω)



(Note) pin 8 : No connection
should be opened at operating mode.

Package Dimensions 3004A-D14TKIC
(unit : mm)



SANYO: DIP14TK

Electrical Characteristics at Ta=25°C			min	typ	max	unit
Output Voltage	$V_{OUT(1)}$	V_{IN}=15V,I_{OUT}=230mA			1.7	V
Output Voltage	$V_{OUT(2)}$	V_{IN}=15V,I_{OUT}=150mA			1.5	V
Output Leak Current	Ioff	V_{IN}=1.0V,V_{OUT}=20V			100	μA
Input Current	I_{IN}	V_{IN}=18V			1.8	mA
Output Current	I_{OUT}	I_{IN}=0.5mA,V_{OUT}=1.5V	150			mA
Input Leak Current	Ileak	V_{IN}=−35V	−10			μA