

Monolithic Digital IC

<b>SANYO</b>	NO.783C	<b>LB1272</b>
<b>6-Unit, Darlington Transistor Array</b>		

The circuit configuration of this IC is a 6-unit Darlington transistor array consisting of NPN transistors and is ideally suited for use in printer hammer driving, lamp or relay driving applications. With the built-in protective diodes against negative inputs, this IC offers advantages to the driver circuit design of electronic calculator with printer and cash resister, etc. which also use display tubes.

**Features**

- Ideally suited for 18-digit printer because of built-in 6 units.
- With built-in protective diodes against negative inputs.
- Ideally suited for printer mechanism with load current 85 mA.

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

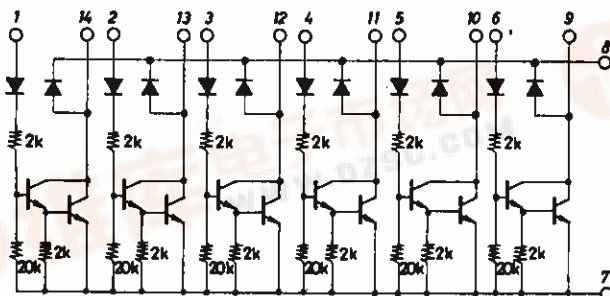
			unit
Output Supply Voltage	$V_{OUT}$	-0.3 to +22	V
Input Supply Voltage	$V_{IN}$	-40 to +12	V
Pin 8 Supply Voltage	$V_{CC}$	-0.3 to +20	V
Output Flow-in Current	$I_{OUT}$	Per unit 100	mA
Instantaneous Output Flow-in Current	$I_{OP}$	Per unit, duty=10% 150	mA
Spark Killer Diode Forward Current	$I_{F(S)}$	" 150	mA
GND Pin Flow-out Current	$I_{GP}$	" -900 to 0	mA
Pin 8 Instantaneous Flow-out Current	$I_{CCP}$	" -900 to 0	mA
Pin 8 Flow-out Current	$I_{CC}$	-600 to 0	mA
Allowable Power Dissipation	$P_d \text{ max}$	770	mA
Operating Temperature	$T_{opr}$	-20 to +80	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 to +125	$^\circ\text{C}$

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

			unit
Output Supply Voltage	$V_{OUT}$	22	V max
Input High Level Voltage	$V_{IH}$	Output pin current=100mA 3 to 12	V
Input Low Level Voltage	$V_{IL}$	Output pin current=100 $\mu\text{A}$ -35 to +1	V
Load Inductance	LL	Using protective diode 100	mH max

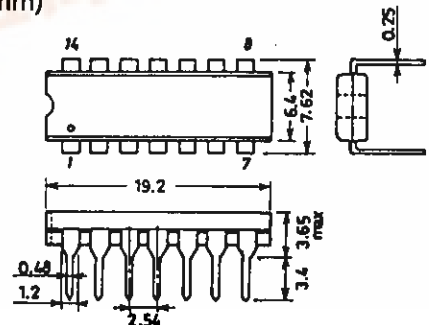
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**Equivalent Circuit**



Unit (resistance:  $\Omega$ )

**Package Dimensions 3003A-D14IC (unit : mm)**



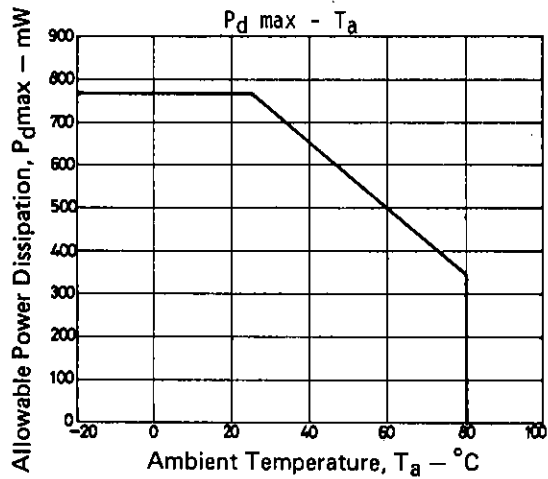
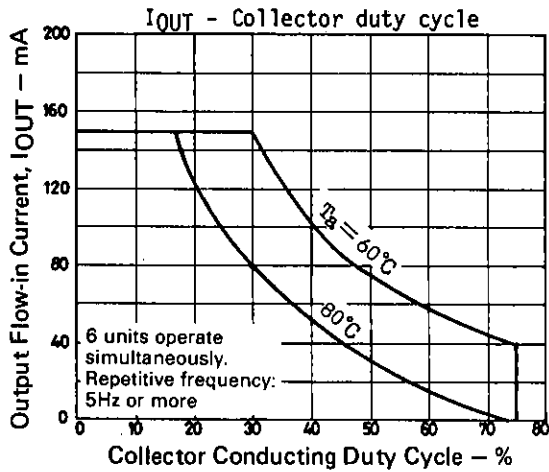
SANYO: DIP14



LB1272

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

			min	typ	max	unit
Output Voltage	$V_{OUT(1)}$	$V_{IN}=3\text{V}, I_{OUT}=150\text{mA}$			1.7	V
	$V_{OUT(2)}$	$V_{IN}=3\text{V}, I_{OUT}=100\text{mA}$			1.4	V
Output Sustain Voltage	$V_{OUT(s)}$	$V_{IN}=\text{open}, I_{OUT}=150\text{mA}$ Applied time $< 10\mu\text{s}$	22			V
Output Leakage Current	$I_{off}$	$V_{IN}=1\text{V}, V_{out}=22\text{V}$			100	$\mu\text{A}$
Input Current	$I_{IN}$	$V_{IN}=3\text{V}$			1	mA
Output Current	$I_{OUT}$	$I_{IN}=0.3\text{mA}, V_{OUT}=1.4\text{V}$	100			mA
Input Leakage Current	$I_{leak}$	$V_{IN}=-35\text{V}$	-10			$\mu\text{A}$
Spark Killer Diode Leakage Current	$I_{leak(s)}$	$V_{OUT}=0\text{V}, \text{Pin}8=20\text{V}$			30	$\mu\text{A}$
Spark Killer Diode Forward Voltage	$V_F(S)$	$I_F(3)=150\text{mA}$			1.7	V



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