

SANYO	No.783B	LB1272 Monolithic Digital IC
6-Unit, Darlington Transistor Array		

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 $T_a=25^\circ\text{C}$

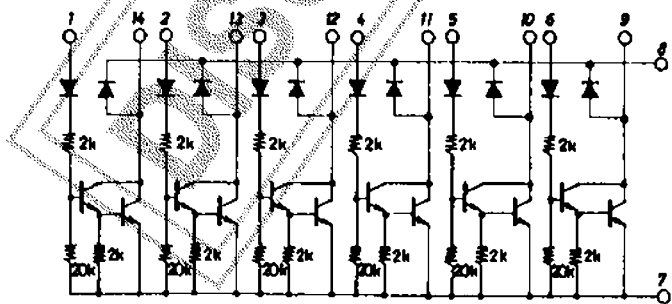
			unit
Output Supply Voltage	V _{OUT}	-0.3 to +22	V
Input Supply Voltage	V _{IN}	-40 to +12	V
Pin 8 Supply Voltage	V _{CC}	-0.3 to +20	V
Output Flow-in Current	I _{OUT}	Per unit 100	mA
Instantaneous Output Flow-in Current	I _{OP}	Per unit, duty=10% Pulse width < 20ms	150 mA
Spark Killer Diode Forward Current	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 max		770 mA
Operating Temperature	T _{opr}		-20 to +80 °C
Storage Temperature	T _{stg}		-40 to +125 °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=100μA	-35 to +1 V
Load Inductance	L _L	Using protective diode	100 mH max

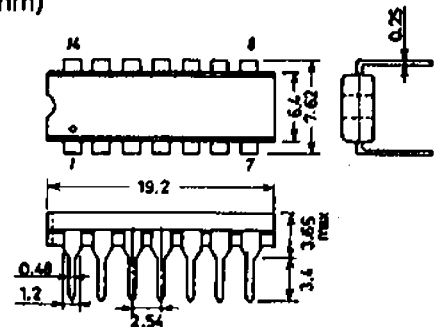
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Equivalent Circuit



Unit (resistance : Ω)

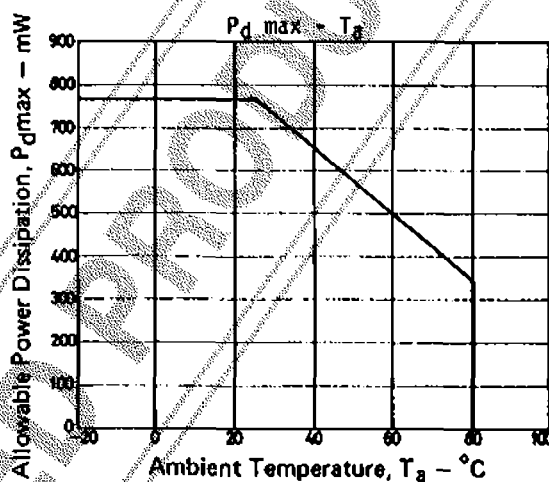
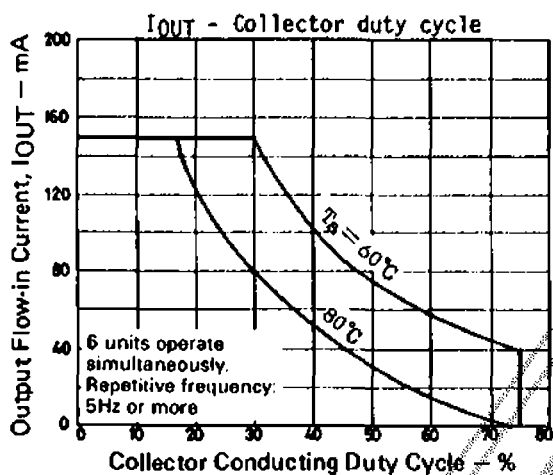
Package Dimensions 3003A (unit : mm)



SANYO: DIP14

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

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



DISCONTINUED PRODUCT