Ordering number: EN 783C

Monolithic Digital IC

NO.783C

LB1272

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°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	Topr		−20 to +80	°C
Storage Temperature	T_{stg}		−40 to +125	°C

Allowable Operating Conditions at T_a = 25°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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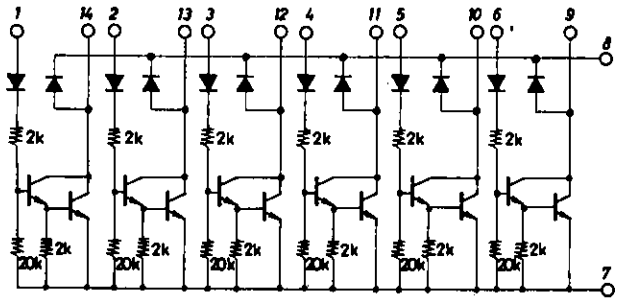
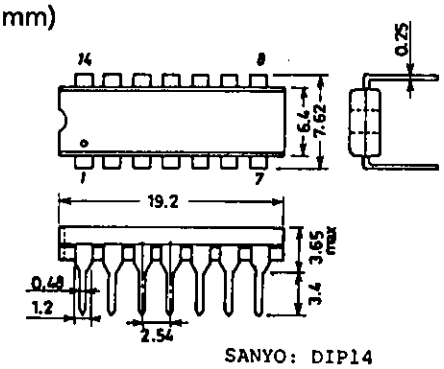
Equivalent Circuit



Unit (resistance: Ω)

Package Dimensions 3003A-D14IC
(unit : mm)



SANYO: DIP14

Operating Characteristics at T_a=25°C			min	typ	max	unit
Output Voltage	$V_{OUT(1)}$	V_{IN}=3V, I_{OUT}=150mA			1.7	V
	$V_{OUT(2)}$	V_{IN}=3V, I_{OUT}=100mA			1.4	V
Output Sustain Voltage	$V_{OUT(s)}$	V_{IN}=open, I_{OUT}=150mA Applied time<10μs	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}=0.3mA, 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, Pin8=20V			30	μA
Spark Killer Diode Foward Voltage	$V_{F(S)}$	I_F(3)=150mA			1.7	V