

**SANYO**

NO.790C

**LB1275****7-Unit, Darlington Transistor Array**

This LB1275, 7-unit Darlington transistor array using NPN transistors, is specially designed for printer driver, lamp or relay driver. Protector diodes against negative input are used by which it is easy to design drive circuits of a calculator with a printer using indicator or a cash register.

**Features**

- . 7-unit version (DIP-16) of LB1274 (6-unit DIP-14)
- . Protector diodes against negative input ( $V_{IN} = -40$  to  $+20$  V).
- . Spark killer diodes for inductive load.
- . Suitable for 85mA type printer mechanism ( $I_{OUTmax} = 100$ mA DC).

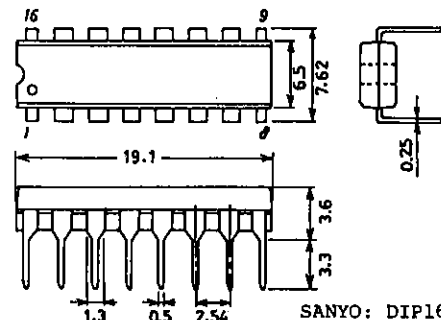
Absolute Maximum Ratings at  $T_a = 25^\circ\text{C}$ , voltage at pin 8=0V.

			unit
Output Supply Voltage	$V_{OUT}$	-0.3 to +22	V
Input Supply Voltage	$V_{IN}$	-40 to +20	V
Pin 8 Supply Voltage	$V_{8P}$	-0.3 to +20	V
Output Flow-in Current	$I_{OUT}$	per unit	0 to 100 mA
Instantaneous Output Flow-in Current	$I_{OP}$	per unit, duty=10%, pulse width < 20ms	0 to 150 mA
Forward Current of Spark Killer Diode	$I_{F(S)}$	per diode, duty=10%, pulse width < 20ms	150 to 0 mA
Flow-out Current at GND Pin	$I_8$		-900 to 0 mA
Instantaneous Flow-out Current at Pin 8	$I_{8P}$	duty=10%, pulse width < 20ms	-500 to 0 mA
Instantaneous Flow-out Current at Pin 9	$I_{9P}$	duty=10%, pulse width < 20ms	-900 to 0 mA
Allowable Power Dissipation	$P_{Dmax}$		900 mW
Operating Temperature	$T_{opr}$		-20 to +80 °C
Storage Temperature	$T_{stg}$		-40 to +125 °C

Allowable Operating Conditions at  $T_a = 25^\circ\text{C}$ , voltage at pin 8=0V

			unit
Output Supply Voltage	$V_{OUT}$		22 V min.
Input 'H' Level Voltage	$V_{IH}$	output pin current=100mA	+9 to +20 V
Input 'L' Level Voltage	$V_{IL}$	output pin current=100uA	-35 to +1 V
Load Inductance	$L_L$	with protector diode	100mH min.

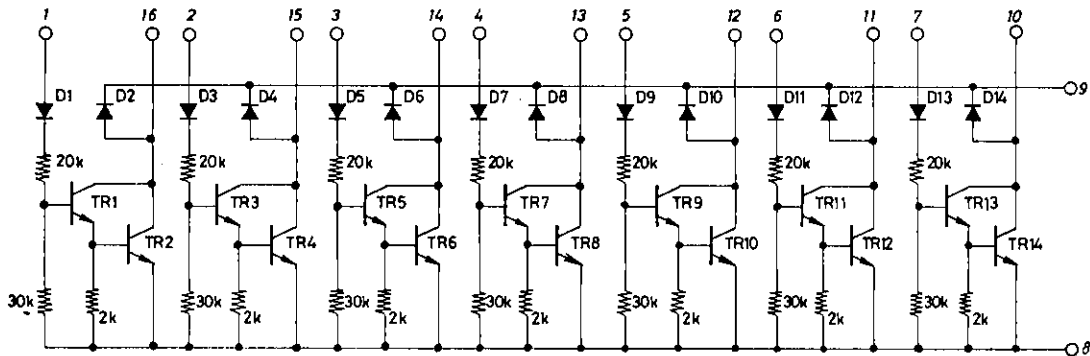
Package Dimensions 3064-D16TR  
(unit : mm)



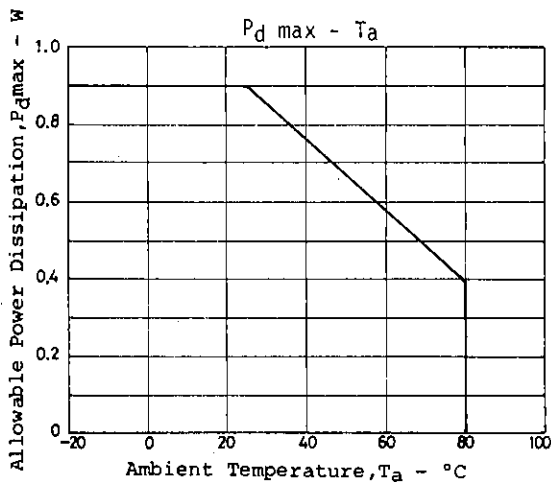
**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**  
TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

Electrical Characteristics at $T_a=25^\circ\text{C}$ , voltage at pin 8=0V		min	typ	max	unit
Output Voltage	$V_{\text{OUT}}(1)$	$V_{\text{IN}}=9.0\text{V}, I_{\text{OUT}}=150\text{mA}$		1.7	V
	$V_{\text{OUT}}(2)$	$V_{\text{IN}}=9.0\text{V}, I_{\text{OUT}}=100\text{mA}$		1.4	V
Output Sustain Voltage	$V_{\text{OUT}}(s)$	$V_{\text{IN}}=\text{open}, \text{applied time}$	22		V
		$< 10\mu\text{s}, I_{\text{OUT}}=150\text{mA}$			
Output Leak Current	$I_{\text{off}}$	$V_{\text{IN}}=1.0\text{V}, V_{\text{OUT}}=22\text{V}$		100	$\mu\text{A}$
Input Current	$I_{\text{IN}}(1)$	$V_{\text{IN}}=18\text{V}$		1.8	mA
	$I_{\text{IN}}(2)$	$V_{\text{IN}}=9\text{V}$		0.8	mA
Output Current	$I_{\text{OUT}}$	$I_{\text{IN}}=0.3\text{mA}, V_{\text{OUT}}=1.4\text{V}$		100	mA
Input Leak Current	$I_{\text{leak}}$	$V_{\text{IN}}=-35\text{V}$		-10	$\mu\text{A}$
Leak current at Spark	$I_{\text{leak}}(s)$	$V_{\text{OUT}}=0\text{V}, \text{pin } 8=20\text{V}$		30	$\mu\text{A}$
Killer Diode					
Forward Voltage at Spark	$V_{\text{F}}(s)$	$I_{\text{F}}(s)=150\text{mA}$		1.7	V
Killer Diode					

Equivalent Circuit



Unit (resistance:  $\Omega$ )



- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use:
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.