

Monolithic Digital IC

SANYO	NO.2631B	LB1720
		Thermal Head-Use, 8-Channel, Transistor Array

The LB1720 is an 8-channel transistor array that has a low output saturation voltage and can be driven by a CMOS IC. It is especially suited for use in thermal head, LED drive applications.

Features

- . Common-emitter 8-channel transistor array
- . Low output saturation voltage (0.15V typ $I_o=100\text{mA}$)
- . On-chip base current limiting resistors
- . Capable of being operated direct by TTL, CMOS IC

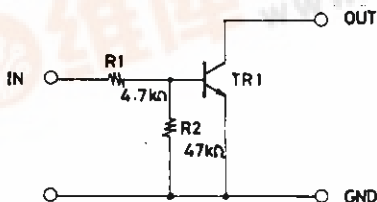
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

			unit
Output Supply Voltage	V_{OUT}	-0.5 to 18	V
Output Current	I_{OUT}	1 unit 200	mA
Input Voltage	V_{IN}	-0.5 to 20	V
GND Pin Current	I_{GND}	900	mA
Allowable Power Dissipation	$P_d \text{ max}$	900	mW
Operating Temperature	T_{opr}	-20 to +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

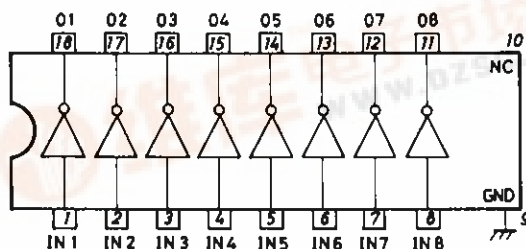
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Output Voltage	V_{OL1}	$I_o=100\text{mA}, V_{IN}=4.5\text{V}$	0.1	0.15	0.3	V
	V_{OL2}	$I_o=100\text{mA}, V_{IN}=4.5\text{V}$	0.1	0.2	0.3	V
		$I_o(\text{other ch})=800\text{mA}$				
Output Leakage Current	I_{OH}	$V_{IN}=0\text{V}, V_o=18\text{V}$			10	μA
Input ON-State Current	$I_{IN(\text{on})}$	$V_{IN}=5.5\text{V}$		1.0	1.6	mA
Input ON-State Voltage	$V_{IN(\text{on})}$	$I_o=20\text{mA}$	2.0			V
Input OFF-State Voltage	$V_{IN(\text{off})}$	$I_o \leq 10\mu\text{A}$			0.4	V

Equivalent Circuit (1 channel)

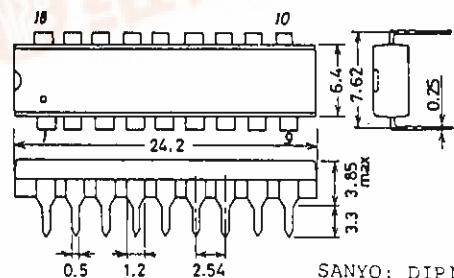


Equivalent Circuit Block Diagram

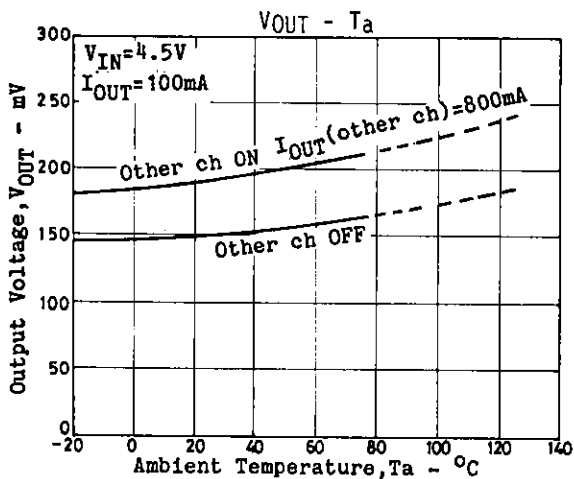
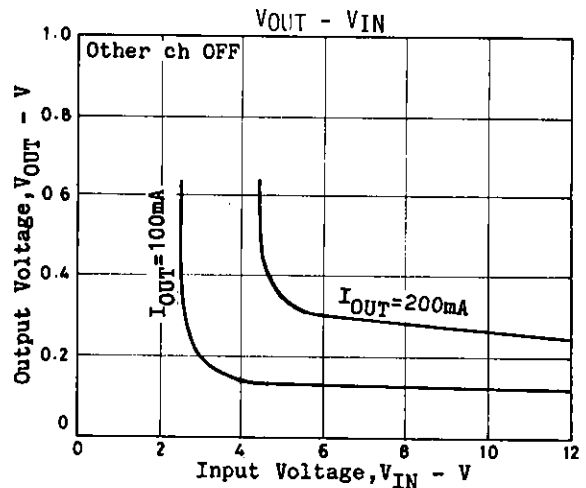
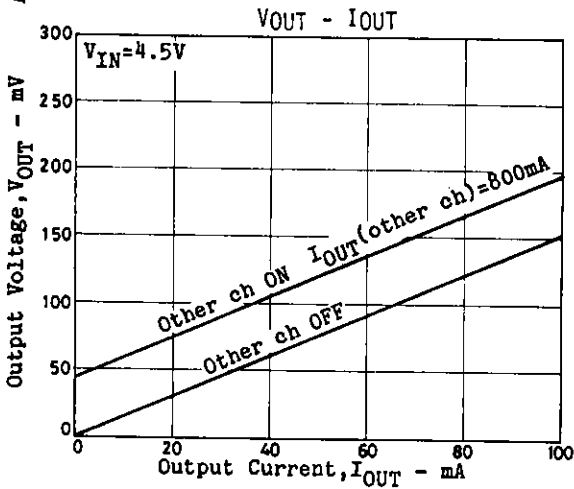
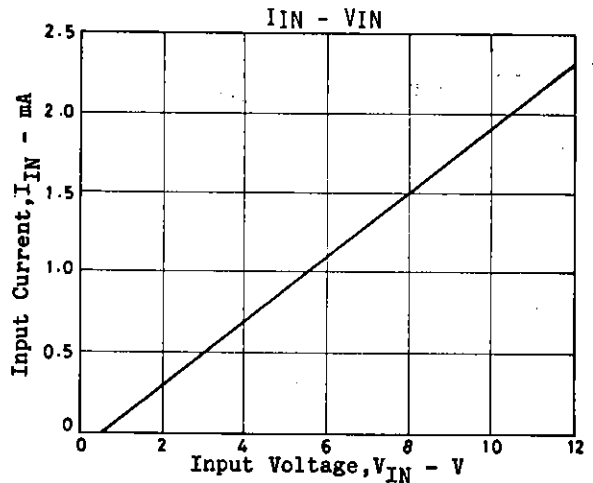
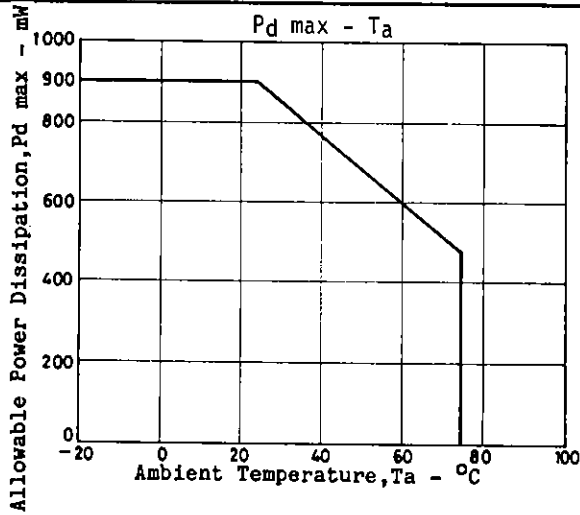


Note: Do not use NC pin.

Package Dimensions 3007A-D18IC (unit : mm)



LB1720



■ 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.