

SANYO

No.1719B

2SD1620

NPN Epitaxial Planar Silicon Transistor

1.5V, 3V Strobe Applications

Features

- Less power dissipation because of low $V_{CE(sat)}$, permitting more flashes of light to be emitted.
- Large current capacity and highly resistant to breakdown.
- Excellent linearity of h_{FE} in the region from low current to high current.
- Ultrasmall size supports high-density, ultrasmall-sized hybrid IC designs.

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

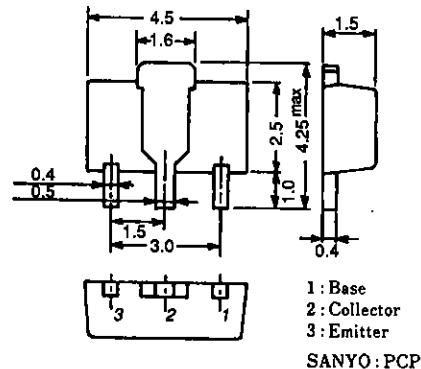
			unit
Collector-to-Base Voltage	V_{CBO}	30	V
Collector-to-Emitter Voltage	V_{CEX}	20	V
Collector-to-Emitter Voltage	V_{CEO}	10	V
Emitter-to-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Collector Current (Pulse)	I_{CP}	5	A
Collector Dissipation	P_C	500	mW
	Mounted on a ceramic board ($250\text{mm}^2 \times 0.8\text{mm}$)	1.3	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

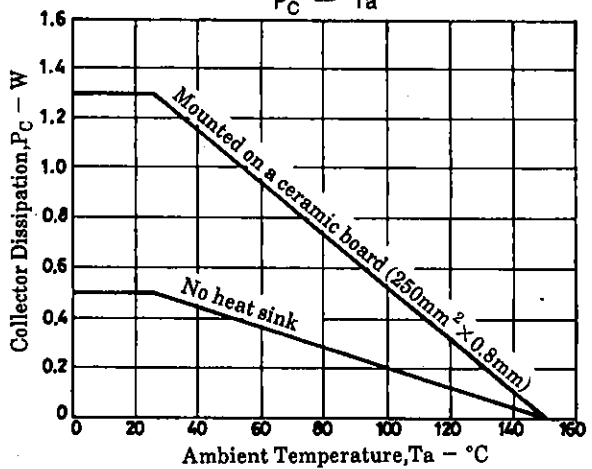
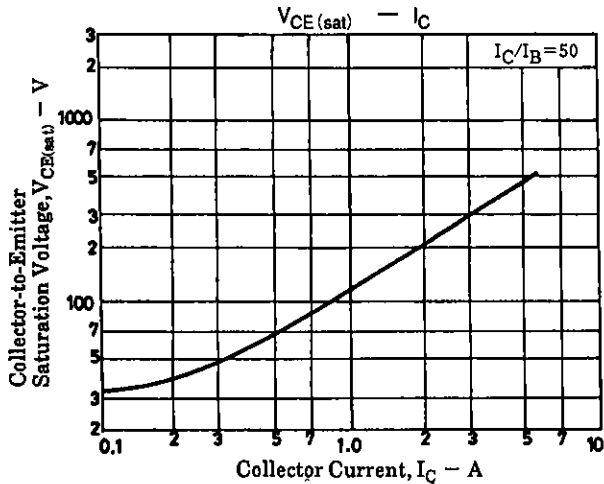
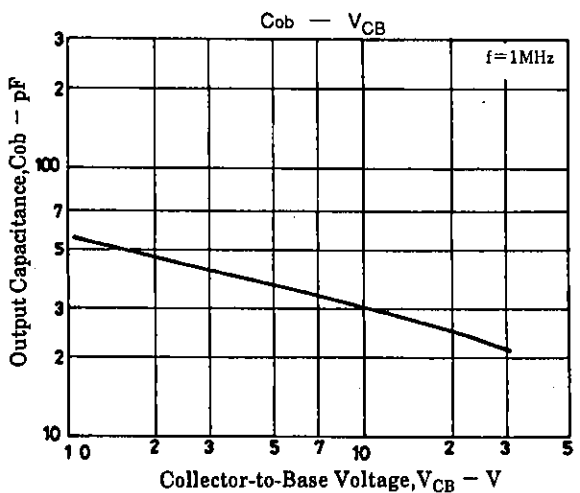
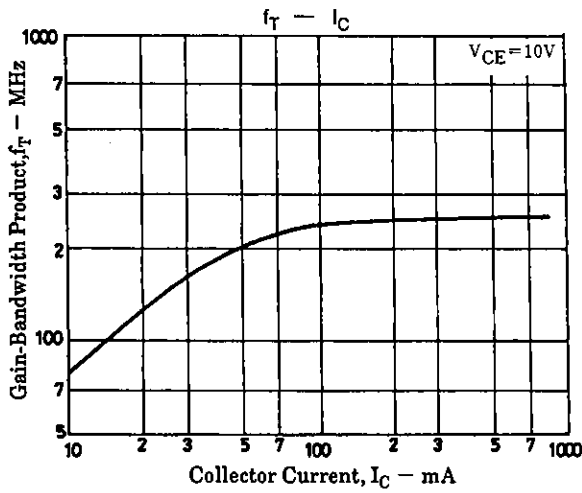
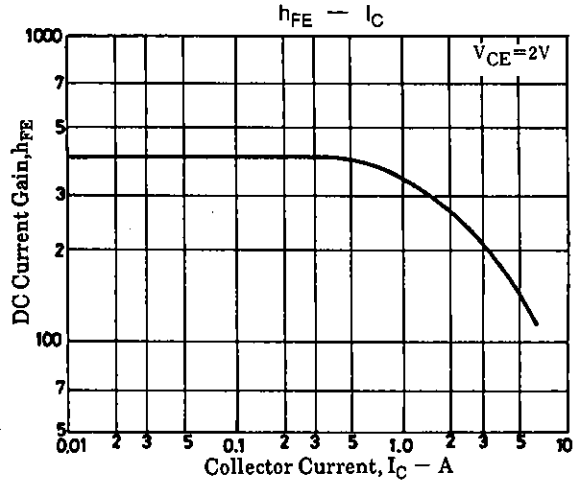
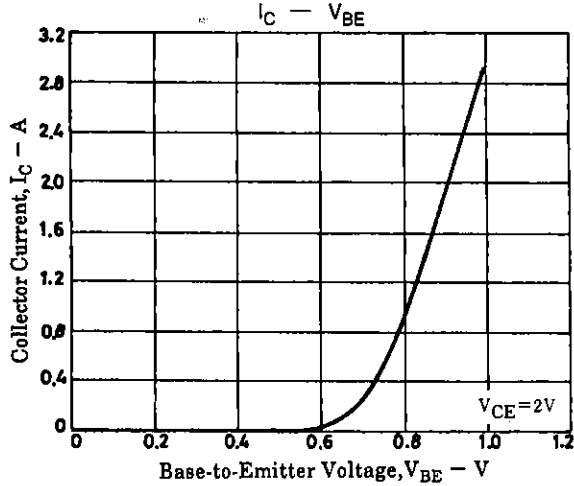
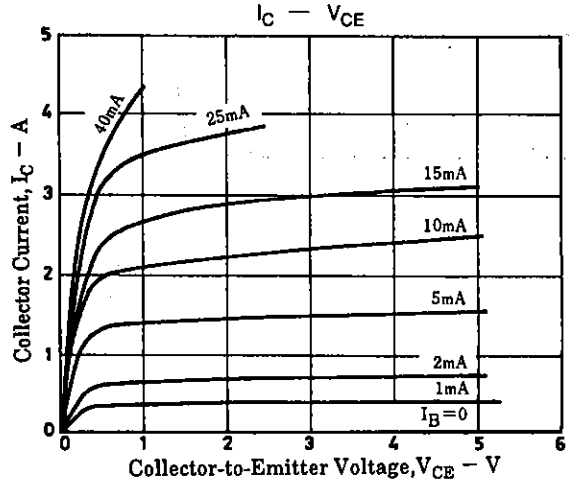
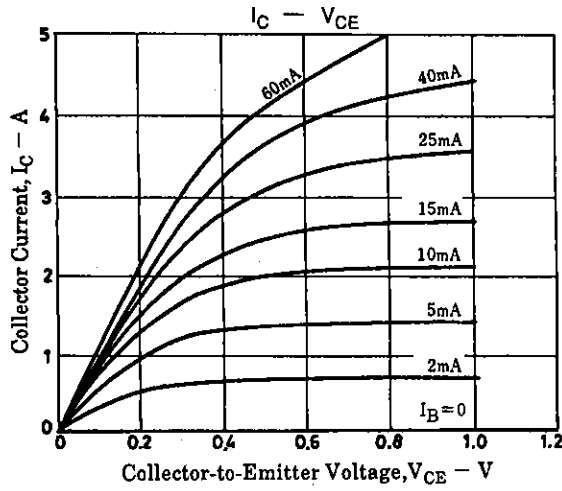
		min	typ	max	unit
Collector Cutoff Current	I_{CBO}			100	nA
Emitter Cutoff Current	I_{EBO}			100	nA
DC Current Gain	h_{FE}	140	210		
Gain-Bandwidth Product	f_T		200		MHz
Output Capacitance	C_{ob}		30		pF
C-E Saturation Voltage	$V_{CE(sat)}$		0.3	0.4	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	30			V
C-E Breakdown Voltage	$V_{(BR)CEX}$	20			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	6			V

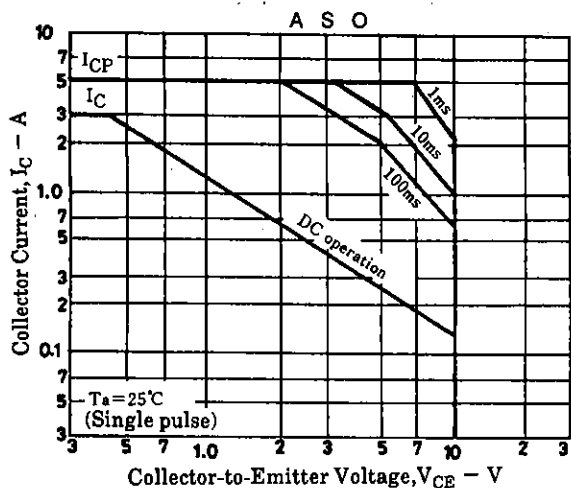
Package Dimensions 2038A

(unit : mm)

**SANYO Electric Co., Ltd. Semiconductor Business Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1-Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN





- 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.

This catalog provides information as of November, 1996. Specifications and information herein are subject to change without notice.