

SANYO

No.550F

2SD879

NPN Epitaxial Planar Silicon Transistor

1.5V, 3V Strobe Applications

Applications

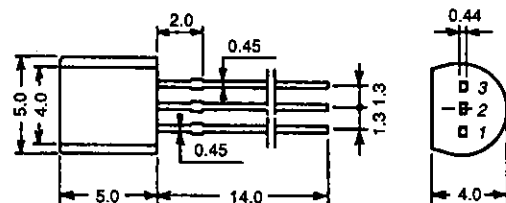
- In applications where two NiCd batteries are used to provide 2.4V, two 2SD879s are used.
- The charge time is approximately 1 second faster than that of germanium transistors.
- Less power dissipation because of low Collector-to-Emitter Voltage $V_{CE(sat)}$, permitting more flashes of light to be emitted.
- Small package and large allowable collector dissipation (TO-92, $PC=750mW$).
- Large current capacity and highly resistant to breakdown.
- Excellent linearity of h_{FE} in the region from low current to high current.

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

			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
		100ms single pulse	
Collector Dissipation	P_C	750	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

Electrical Characteristics at $T_a=25^\circ C$

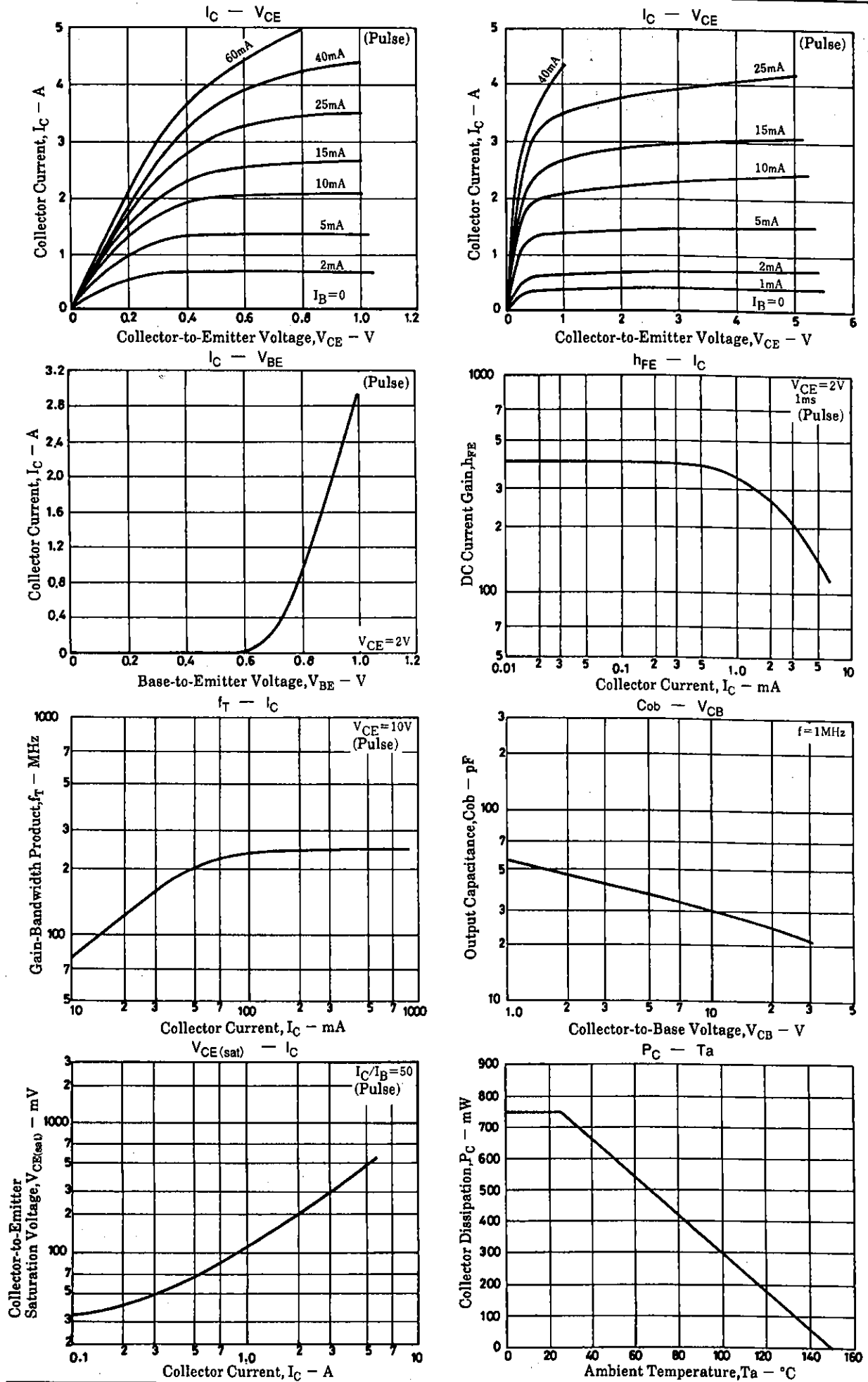
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=20V, I_E=0$			1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V, I_C=0$			1.0	μA
DC Current Gain	h_{FE}	$V_{CE}=2V, I_C=3A$ (pulse)	140	210		
Gain-Bandwidth Product	f_T	$V_{CE}=10V, I_C=50mA$		200		MHz
Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		30		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=60mA$ (pulse)		0.3	0.4	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30			V
C-E Breakdown Voltage	$V_{(BR)CEX}$	$I_C=1mA, V_{BE}=3V$	20			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	10			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6			V

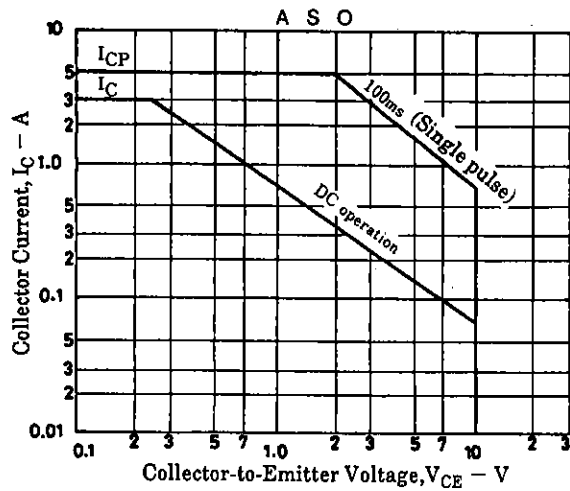
Package Dimensions 2003B
 (unit : mm)

 JEDEC : TO-92
 EIAJ : SC-43
 SANYO : NP

 1. Emitter
 2. Collector
 3. Base

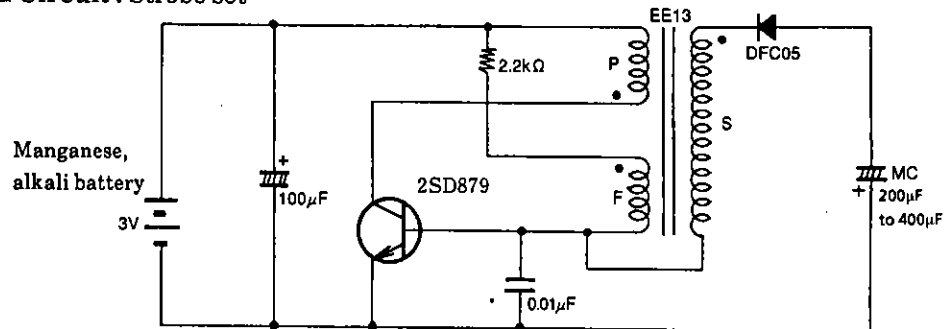
SANYO Electric Co., Ltd. Semiconductor Business Headquarters
 TOKYO OFFICE Tokyo Bldg., 1-10, 1-Chome, Ueno, Taito-ku, TOKYO, 110 JAPAN

N1596TS (KOTO) 8-3475/5137KI/3075KI/5244KI, TS No.550-1/4



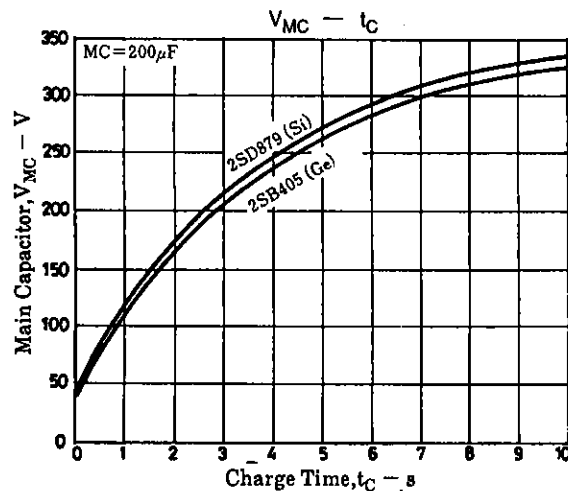
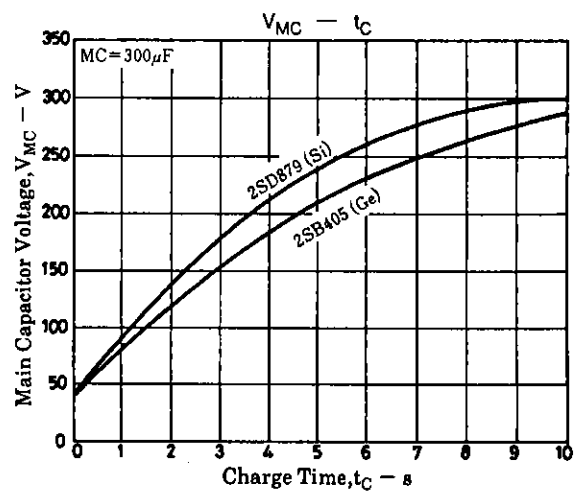
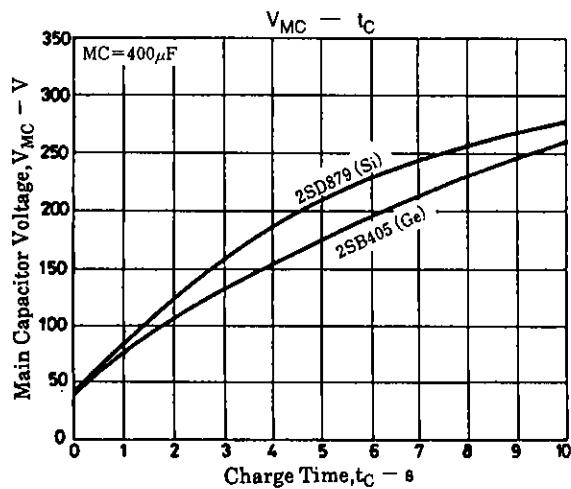


Sample Application Circuit : Strobe set



Core : EE13
(Kijima Wireless)

Number of turns specified for transformer P : $0.55 \phi \times 10 \frac{3}{4} T$, S : $0.07 \phi \times 1350 T$
F : $0.23 \phi \times 12 \frac{3}{4} T$



- 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.