

SANYO

No.1781A

2SD1628

NPN Epitaxial Planar Silicon Transistor

High-Current Switching Applications

Applications

- . Strobe DC-DC converters, relay drivers, hammer drivers, lamp drivers, motor drivers.

Features

- . Low saturation voltage.
- . High h_{FE} .
- . Large current capacity.
- . Very small size making it easy to provide high-density, small-sized hybrid IC's.

Absolute Maximum Ratings at Ta=25°C

		unit
Collector to Base Voltage	V_{CB0}	60 V
Collector to Emitter Voltage	V_{CEO}	20 V
Emitter to Base Voltage	V_{EBO}	6 V
Collector Current	I_C	5 A
Collector Current(Pulse)	I_{CP}	8 A
Collector Dissipation	P_C	500 mW
	$P_C(\text{Note})$	1.5 W
Junction Temperature	T_J	150 °C
Storage Temperature	T_{stg}	-55 to +150 °C

(Note) Mounted on ceramic board (250mm² x 0.8mm)

Electrical Characteristics at Ta=25°C

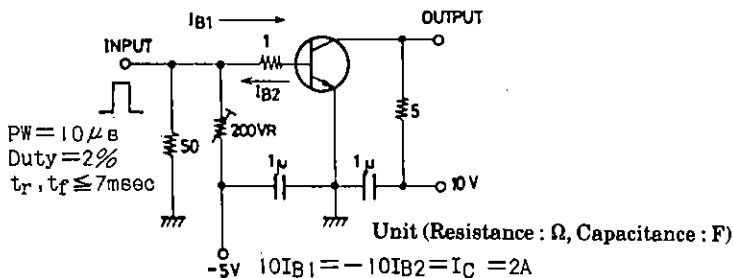
		min	typ	max	unit
Collector Cutoff Current	I_{CB0}			100	nA
Emitter Cutoff Current	I_{EBO}			100	nA
DC Current Gain	$h_{FE}(1)$	120*		560*	
	$h_{FE}(2)$	95			
Gain-Bandwidth Product	f_T		120		MHz
Output Capacitance	c_{ob}		45		pF
C-E Saturation Voltage	$V_{CE(sat)}$			500	mV
B-E Saturation Voltage	$V_{BE(sat)}$			1.5	V
Turn-ON Time	t_{on}		30		ns
Storage Time	t_{stg}		300		ns
Fall Time	t_f		40		ns

* The 2SD1628 is classified by 0.5A h_{FE} as follows:

120 E	200	160 F	320	280 G	560
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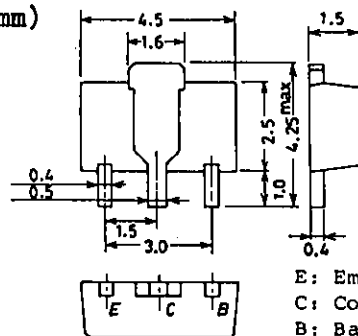
Marking :DK

Switching Time Test Circuit



Package Dimensions 2038

(unit:mm)



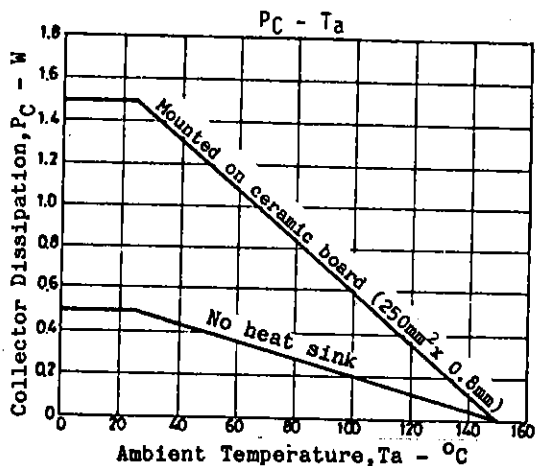
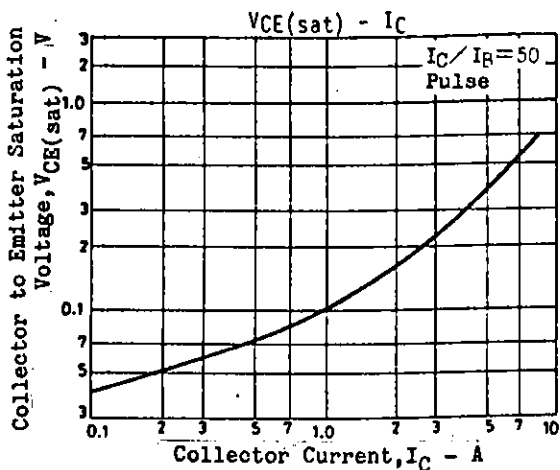
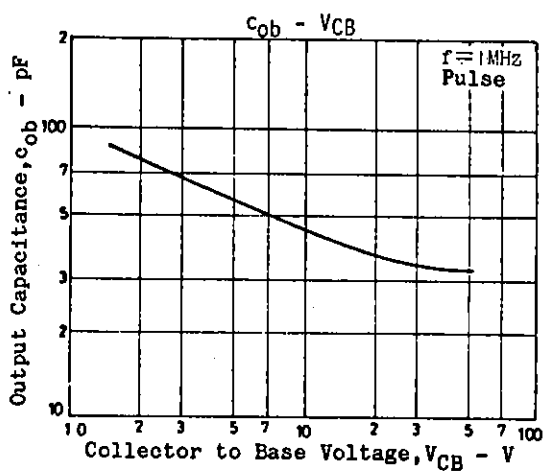
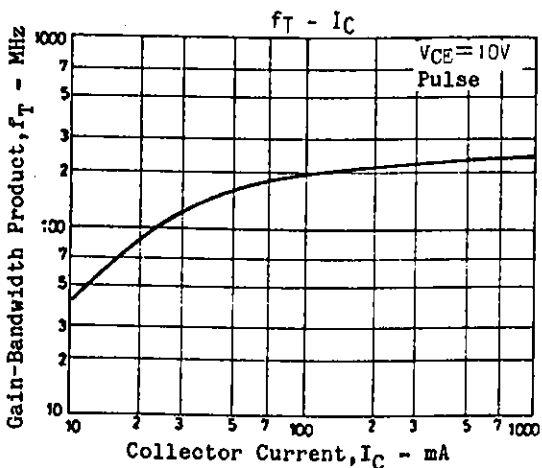
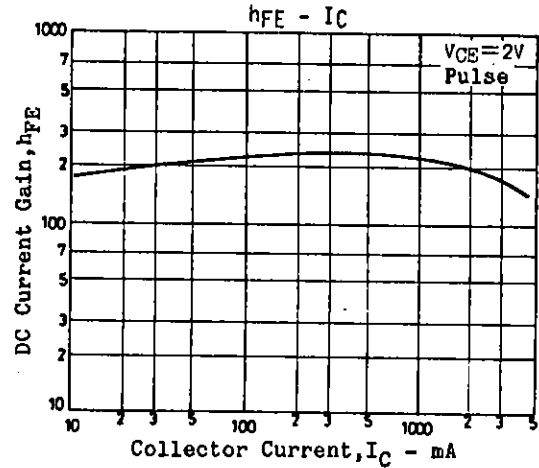
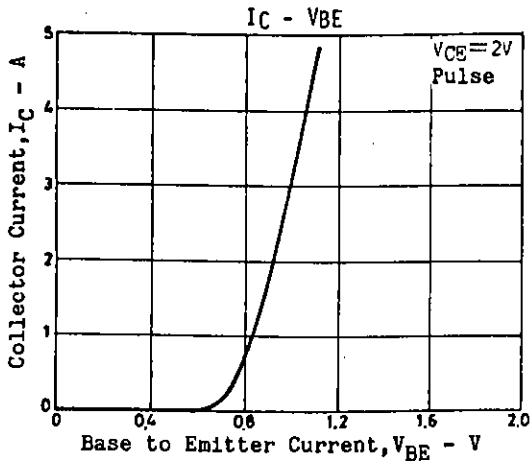
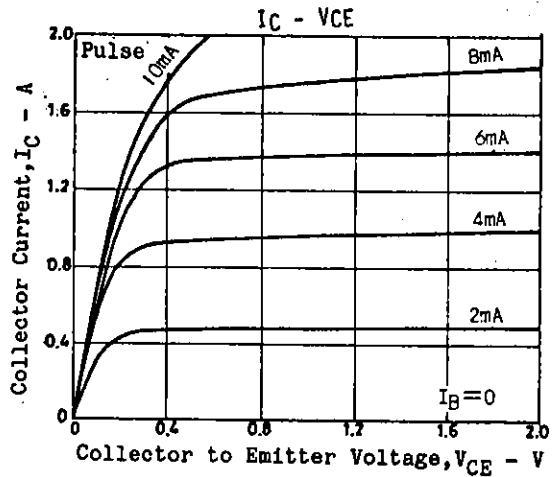
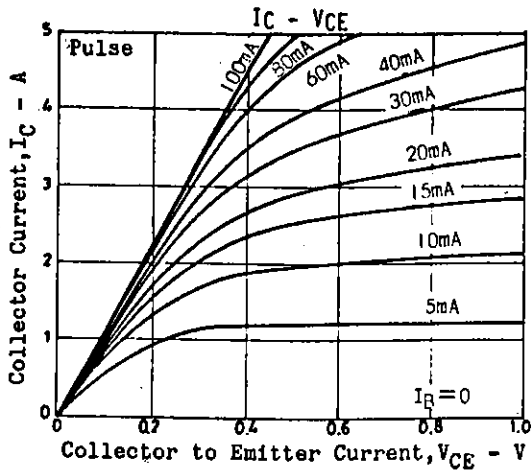
(Bottom View)

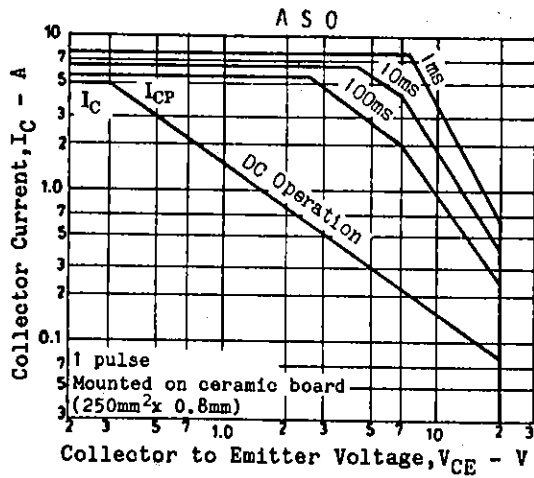
E: Emitter
C: Collector
B: Base

SANYO: PCP

SANYO Electric Co., Ltd. Semiconductor Business Headquarters

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





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