

<b>SANYO</b>	No.2420B	<b>2SB1131</b>
		PNP Epitaxial Planar Silicon Transistor Strobe, High-Current Switching Applications

**Applications**

- . Strobes, power supplies, relay drivers, lamp drivers

**Features**

- . Adoption of FBET, MBIT processes
- . Low saturation voltage
- . Large current capacity
- . Fast switching time

**Absolute Maximum Ratings at Ta=25°C**

			unit
Collector to Base Voltage	V <sub>CB0</sub>	-25	V
Collector to Emitter Voltage	V <sub>CE0</sub>	-20	V
Emitter to Base Voltage	V <sub>EB0</sub>	-5	V
Collector Current	I <sub>C</sub>	-5	A
Collector Current(Pulse)	I <sub>CP</sub>	-8	A
Collector Dissipation	P <sub>C</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

**Electrical Characteristics at Ta=25°C**

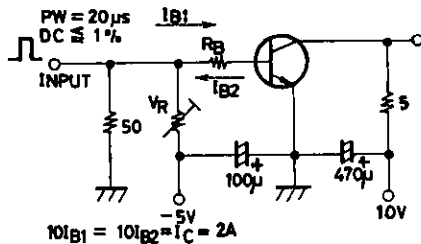
			min	typ	max	unit
Collector Cutoff Current	I <sub>CB0</sub>	V <sub>CB</sub> =-20V, I <sub>E</sub> =0			-500	nA
Emitter Cutoff Current	I <sub>EB0</sub>	V <sub>EB</sub> =-4V, I <sub>C</sub> =0			-500	nA
DC Current Gain	h <sub>FE</sub> (1)	V <sub>CE</sub> =-2V, I <sub>C</sub> =-500mA	100*		400*	
			60			
Gain-Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =-5V, I <sub>C</sub> =-200mA		320		MHz
C-E Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =-3A, I <sub>B</sub> =-60mA	-250	-500		mV
B-E Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =-3A, I <sub>B</sub> =-60mA	-1.0	-1.3		V

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\*: The 2SB1131 is classified by 500mA h<sub>FE</sub> as follows:

100	R	200	140	S	280	200	T	400
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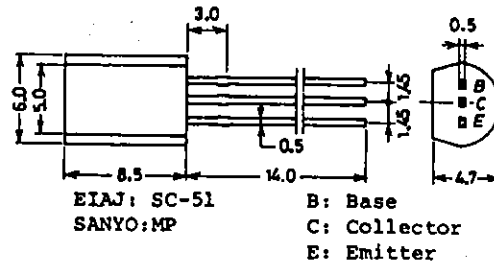
**Switching Time Test Circuit**



Unit(Resistance : Ω , Capacitance : F)

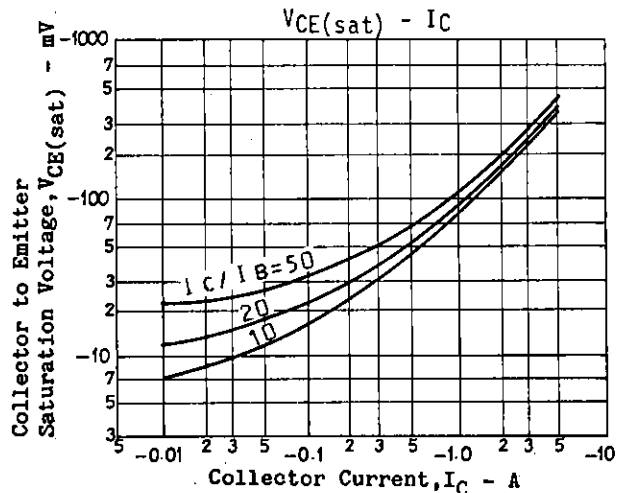
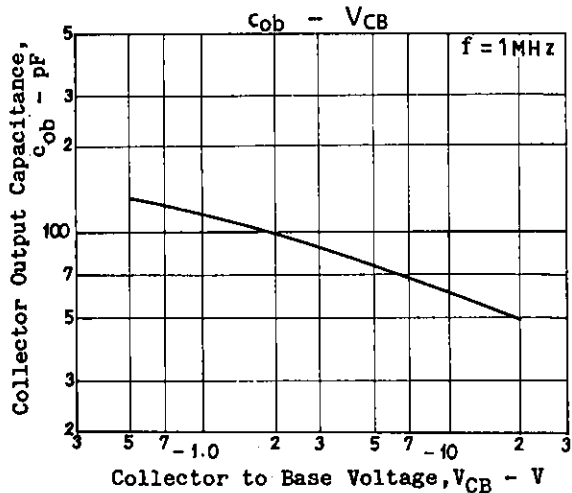
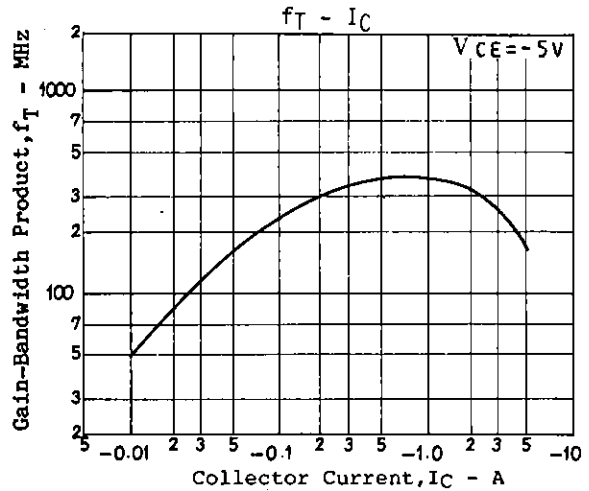
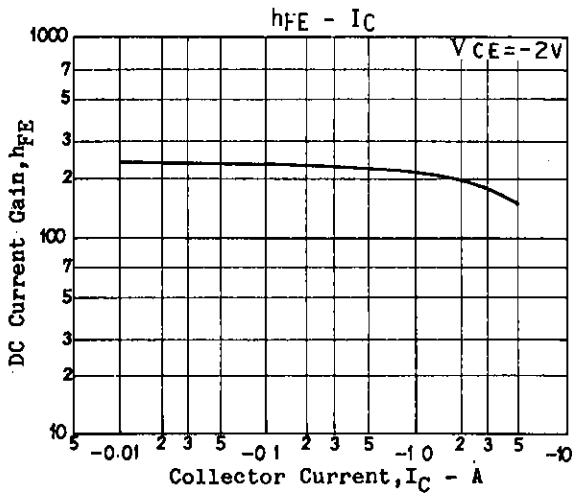
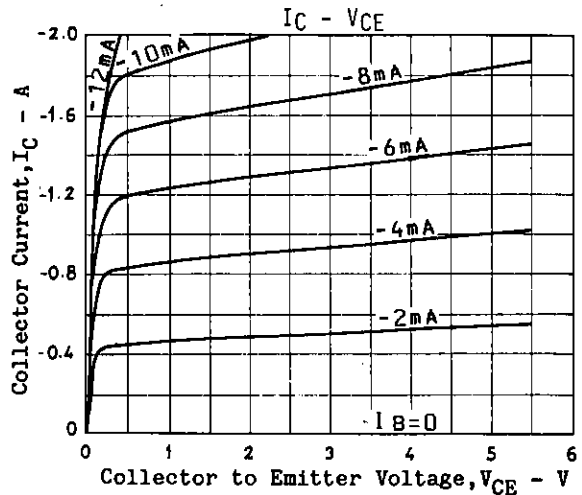
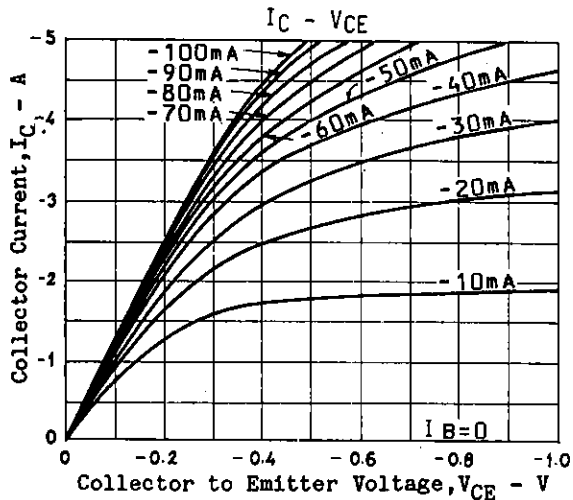
**Package Dimensions 2006A**

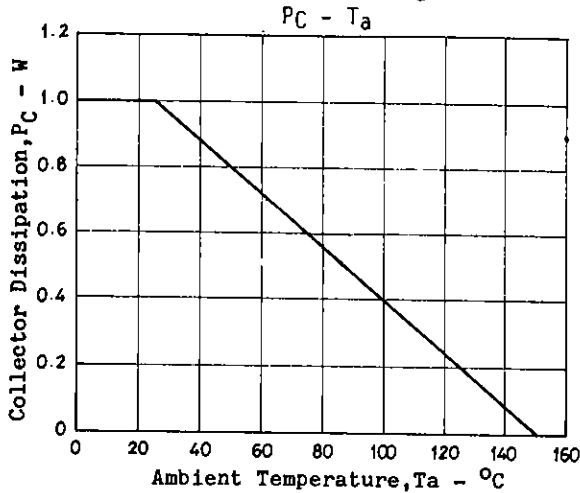
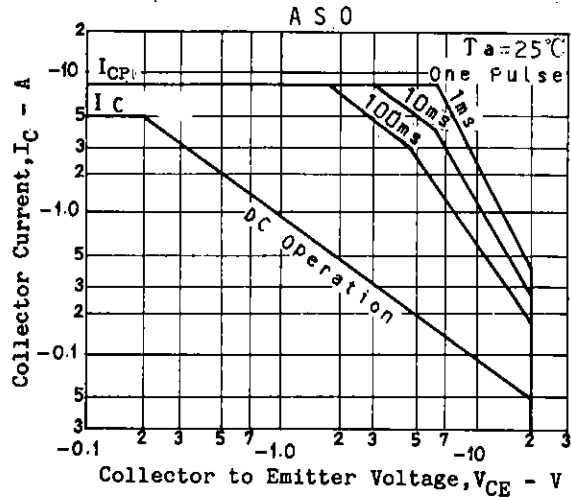
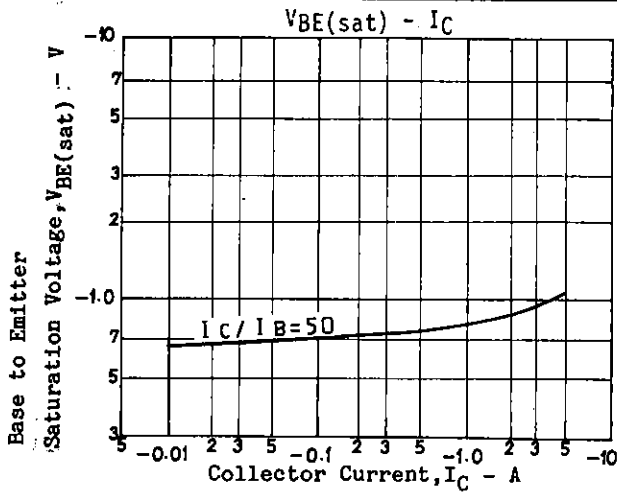
(unit: mm)



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		min	typ	max	unit
Output Capacitance	$c_{ob}$ $V_{CB} = -10V, f = 1MHz$		60		pF
C-B Breakdown Voltage	$V_{(BR)CBO}$ $I_C = -10\mu A, I_E = 0$	-25			V
C-E Breakdown Voltage	$V_{(BR)CEO}$ $I_C = -1mA, R_{BE} = \infty$	-20			V
E-B Breakdown Voltage	$V_{(BR)EBO}$ $I_E = -10\mu A, I_C = 0$	-5			V
Turn-on Time	$t_{on}$ See specified Test Circuit.		40		ns
Storage Time	$t_{stg}$		200		ns
Fall Time	$t_f$		10		ns





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