

SANYO	No.2420B	2SB1131
		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 _{CB0}	-25	V
Collector to Emitter Voltage	V _{CE0}	-20	V
Emitter to Base Voltage	V _{EB0}	-5	V
Collector Current	I _C	-5	A
Collector Current(Pulse)	I _{CP}	-8	A
Collector Dissipation	P _C	1	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

Electrical Characteristics at Ta=25°C

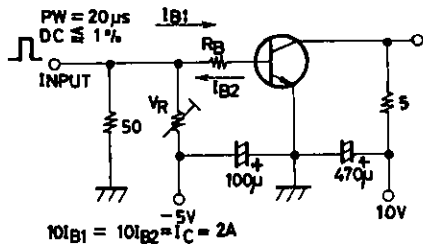
			min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} =-20V, I _E =0			-500	nA
Emitter Cutoff Current	I _{EB0}	V _{EB} =-4V, I _C =0			-500	nA
DC Current Gain	h _{FE} (1)	V _{CE} =-2V, I _C =-500mA	100*		400*	
			60			
Gain-Bandwidth Product	f _T	V _{CE} =-5V, I _C =-200mA		320		MHz
C-E Saturation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

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*: The 2SB1131 is classified by 500mA h_{FE} as follows:

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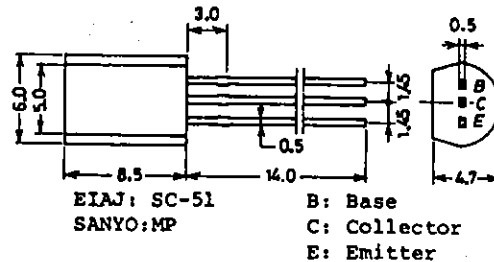
Switching Time Test Circuit



Unit(Resistance : Ω , Capacitance : F)

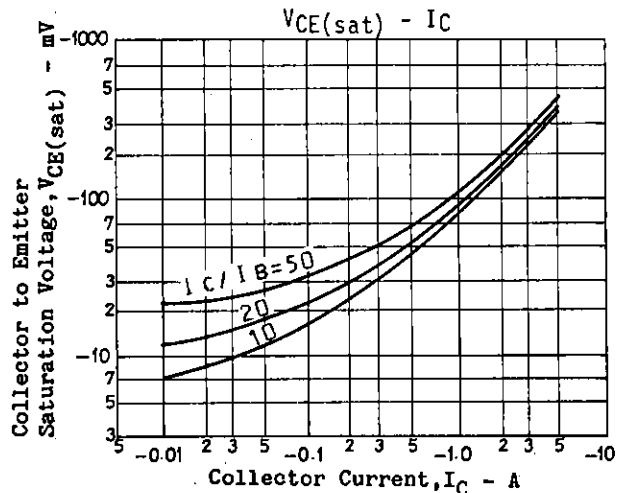
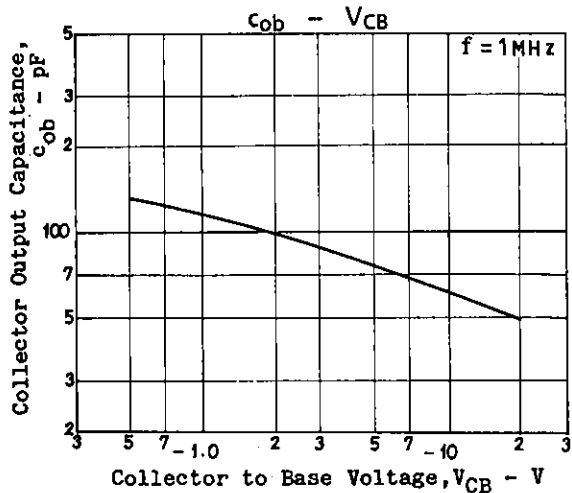
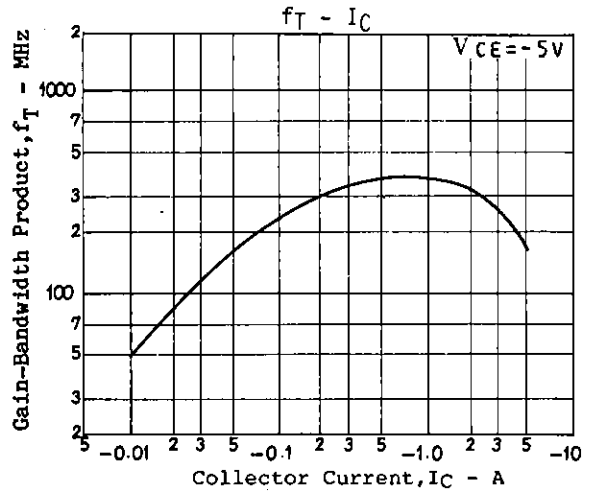
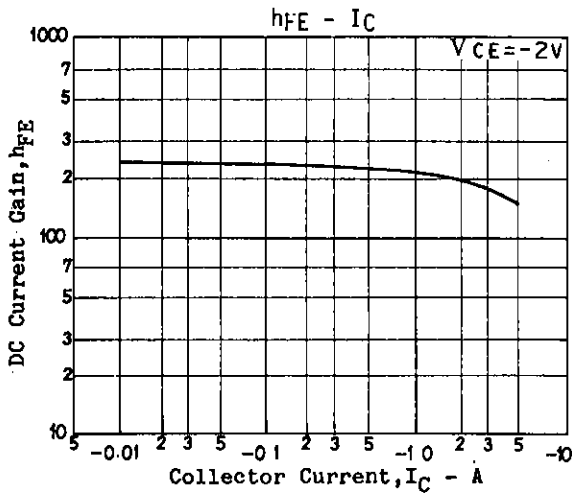
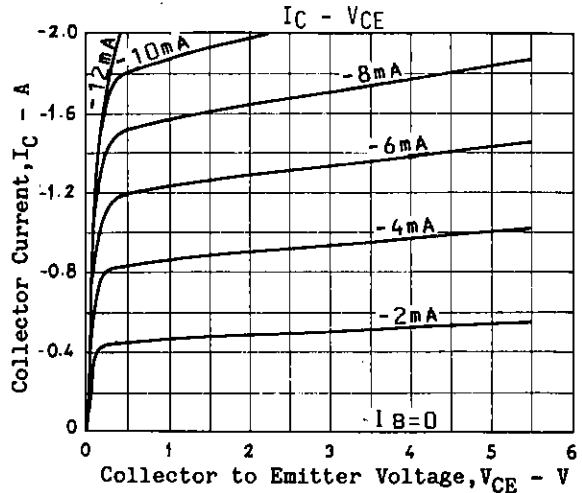
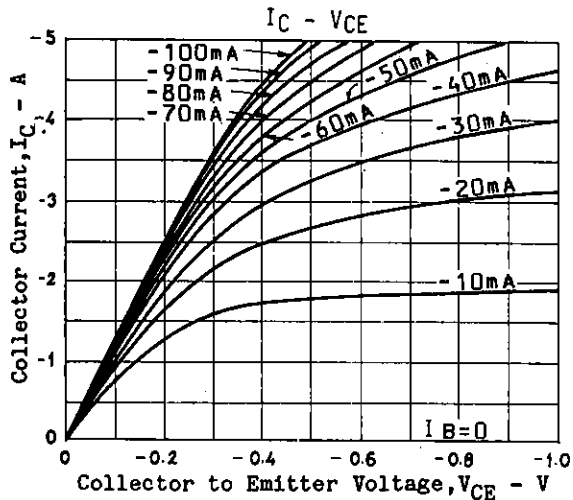
Package Dimensions 2006A

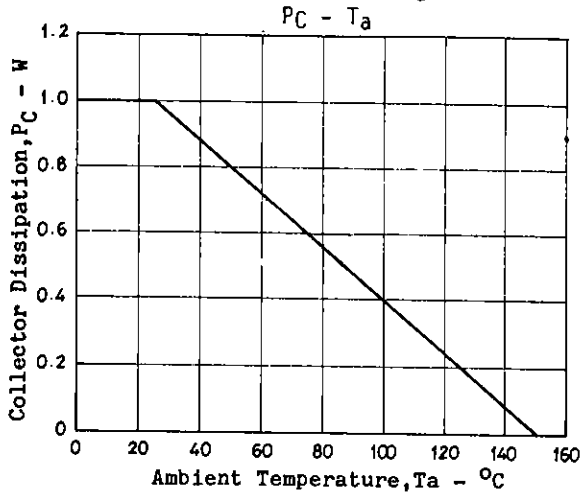
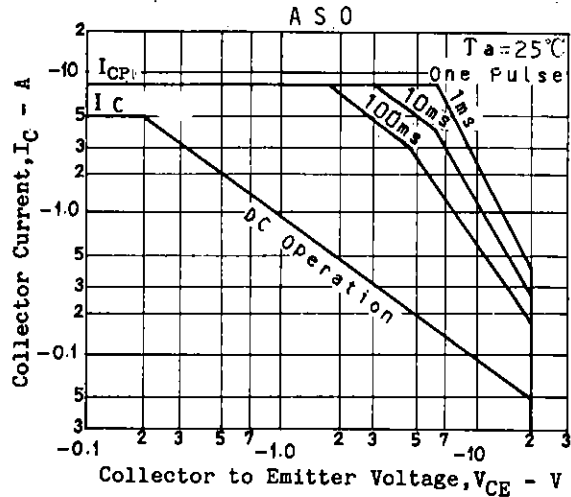
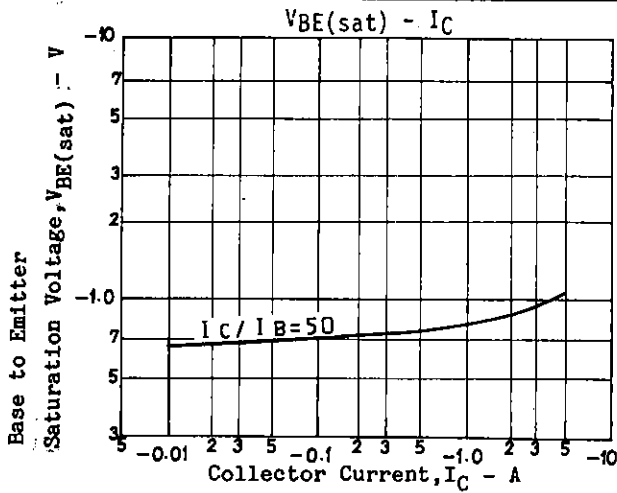
(unit: mm)



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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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