



No.3136

2SA1732

PNP Epitaxial Planar Silicon Transistor

High-Speed Switching Applications

Features

- Adoption of FBET, MBIT processes
- Large current capacity
- Low collector-to-emitter saturation voltage
- Fast switching speed

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Value	unit
Collector to Base Voltage	V _{CB0}	-50	V
Collector to Emitter Voltage	V _{CEO}	-40	V
Emitter to Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-8	A
Collector Current(Pulse)	I _{CP}	-12	A
Collector Dissipation	P _C	1	W
T _c = 25°C			
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

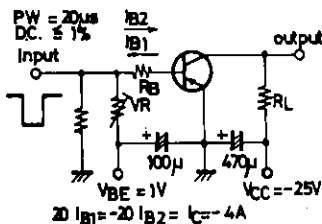
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Test Conditions	min	typ	max	unit
Collector Cutoff Current	I _{CB0}	V _{CB} = -40V, I _E = 0			-1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = -3V, I _C = 0			-1	μA
DC Current Gain	h _{FE} (1)	V _{CE} = -2V, I _C = -500mA	70*		280*	
		V _{CE} = -2V, I _C = -8A	25			
Gain-Bandwidth Product	f _T	V _{CE} = -2V, I _C = -500mA		250		MHz
Output Capacitance	c _{ob}	V _{CB} = -10V, f = 1MHz		100		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = -4A, I _B = -200mA	-0.3	-0.8		V
B-E Saturation Voltage	V _{BE(sat)}	I _C = -4A, I _B = -200mA	-0.95	-1.3		V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = -100μA, I _E = 0	-50			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-40			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = -100μA, I _C = 0	-5			V
Turn-ON Time	t _{on}	See specified Test Circuit.		50	100	ns
Storage Time	t _{stg}	∞		120	220	ns
Turn-OFF Time	t _{off}	∞		150	300	ns

*: The 2SA1732 is classified by 500mA h_{FE} as follows:

70 Q 140	100 R 200	140 S 280
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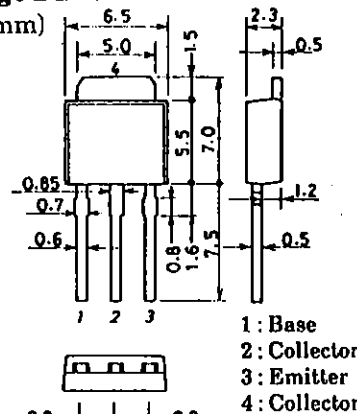
Switching Time Test Circuit



Unit (Capacitance : F)

Package Dimensions 2045B

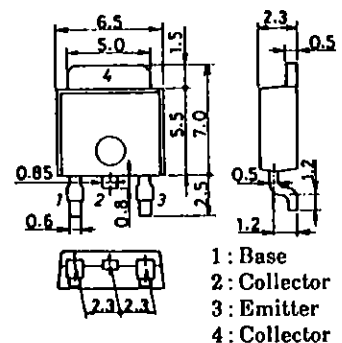
(unit : mm)



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Package Dimensions 2044B

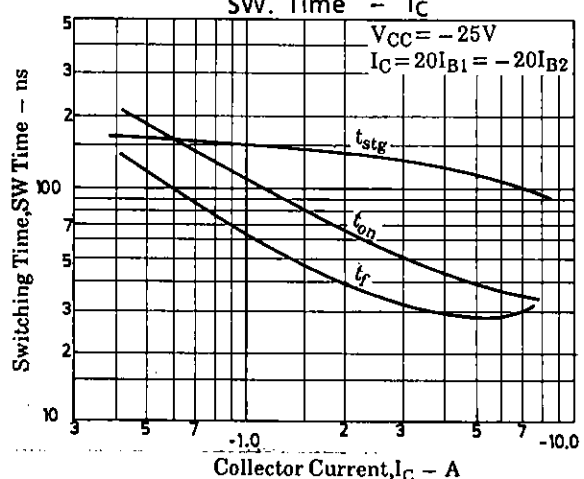
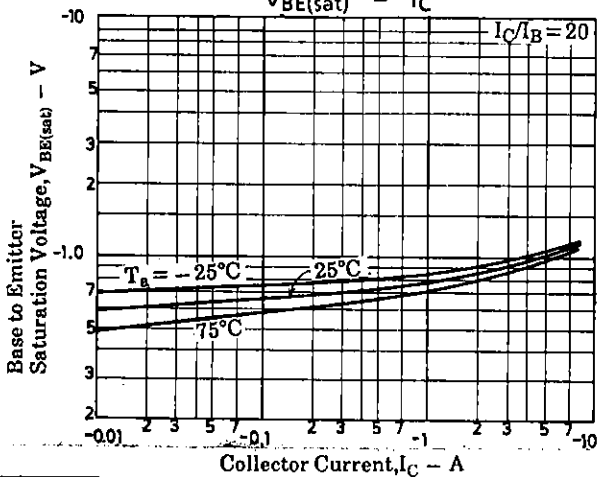
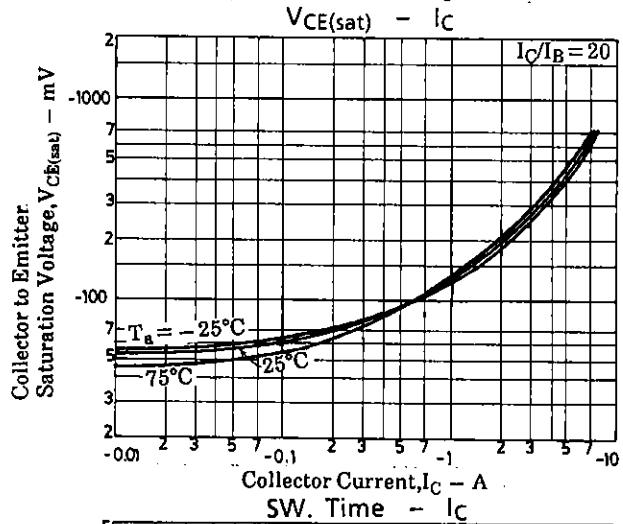
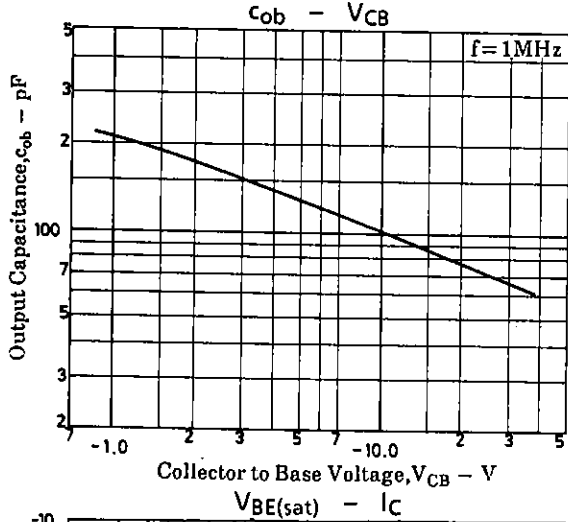
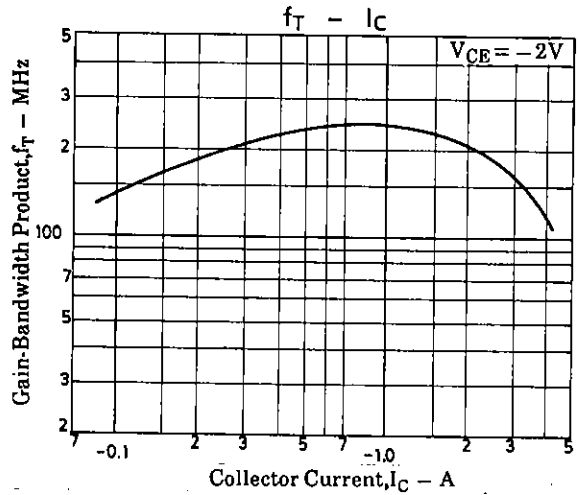
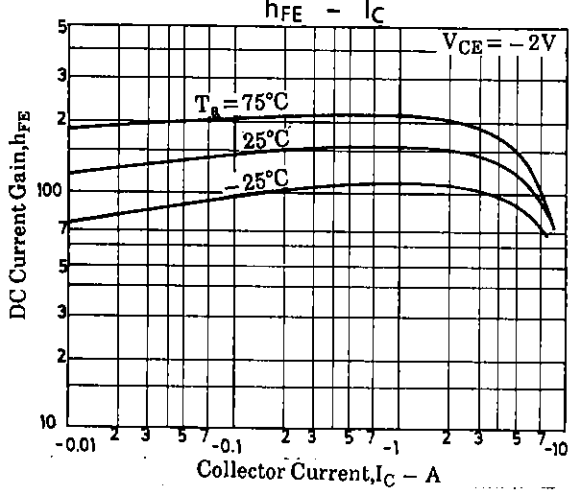
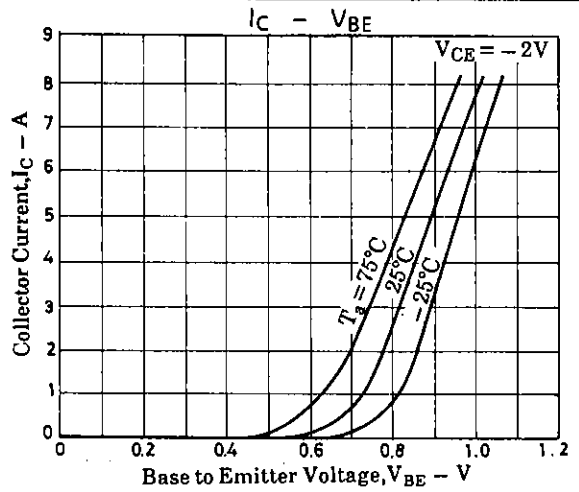
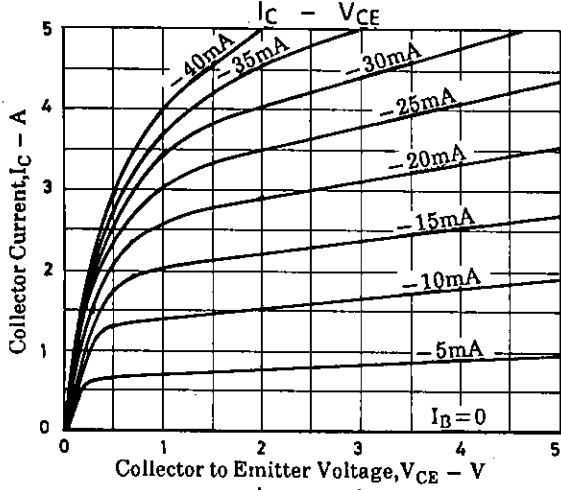
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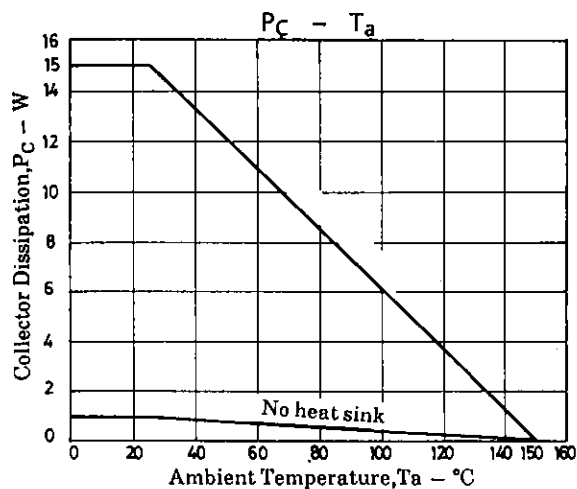
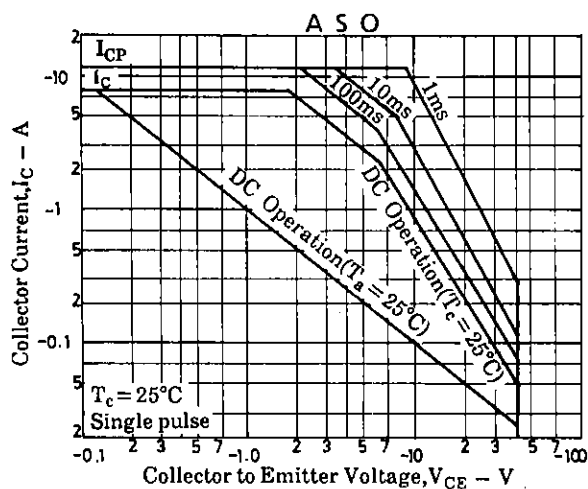


SANYO : TP-FA

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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