

<b>SANYO</b>	No.3136	<b>2SA1732</b>
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**

		unit
Collector to Base Voltage	V <sub>CB0</sub>	-50 V
Collector to Emitter Voltage	V <sub>CEO</sub>	-40 V
Emitter to Base Voltage	V <sub>EBO</sub>	-5 V
Collector Current	I <sub>C</sub>	-8 A
Collector Current(Pulse)	I <sub>CP</sub>	-12 A
Collector Dissipation	P <sub>C</sub>	1 W
	T <sub>c</sub> = 25°C	15 W
Junction Temperature	T <sub>j</sub>	150 °C
Storage Temperature	T <sub>stg</sub>	-55 to +150 °C

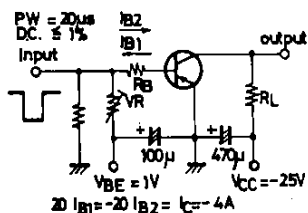
**Electrical Characteristics at Ta = 25°C**

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

\*: The 2SA1732 is classified by 500mA h<sub>FE</sub> as follows:

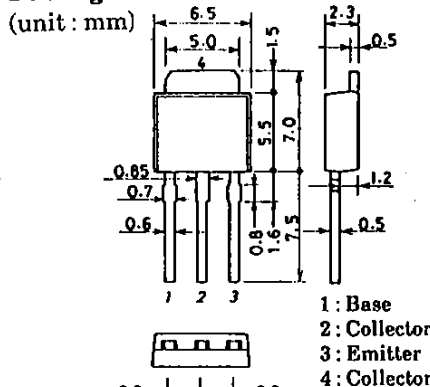
70 Q 140	100 R 200	140 S 280
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**Switching Time Test Circuit**

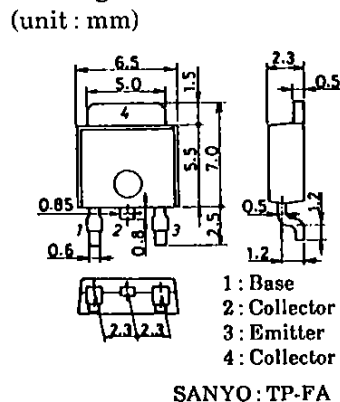


Unit (Capacitance : F)

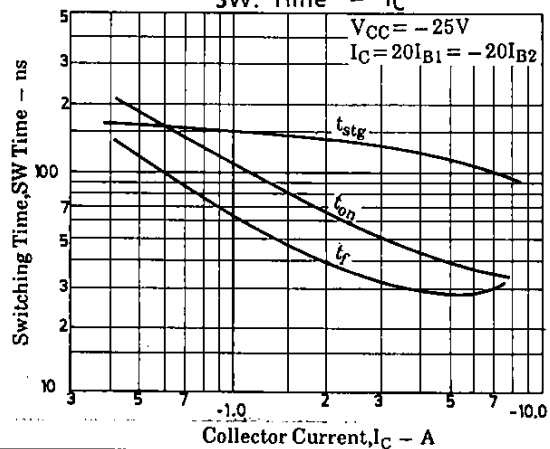
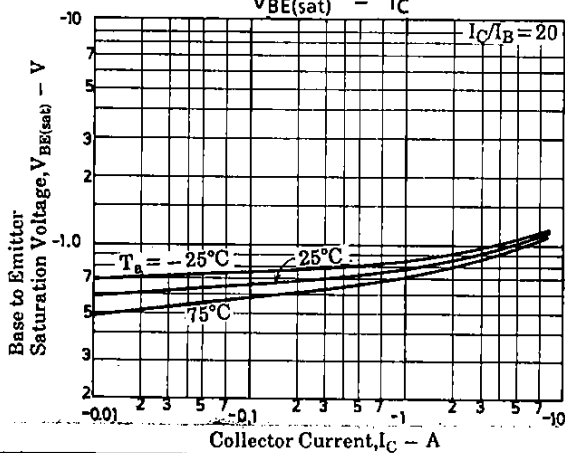
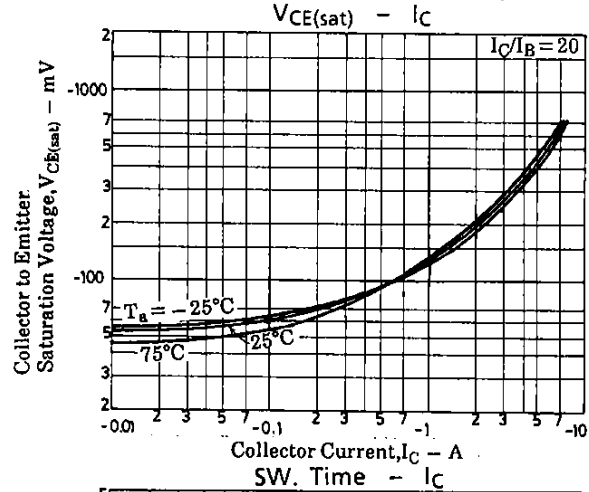
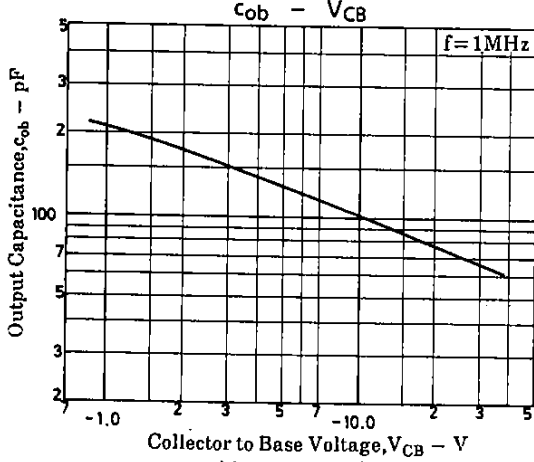
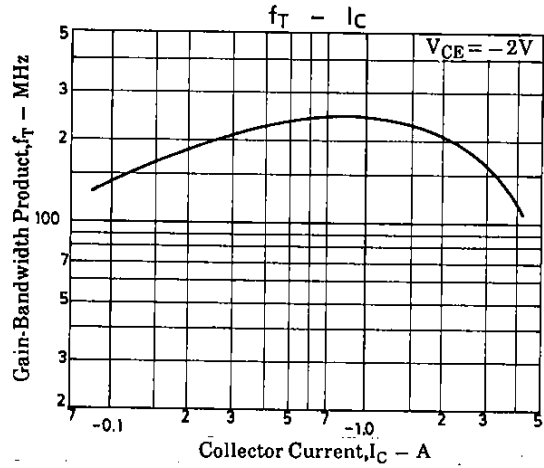
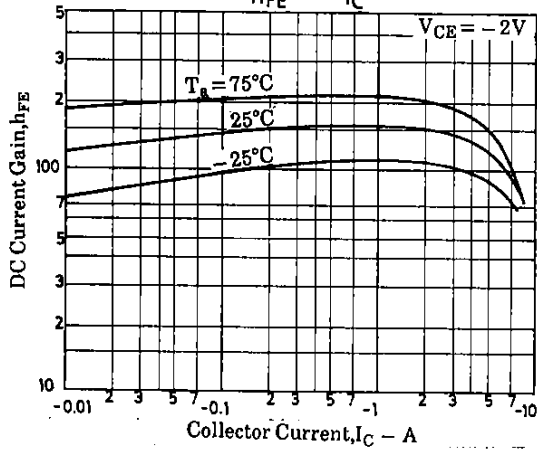
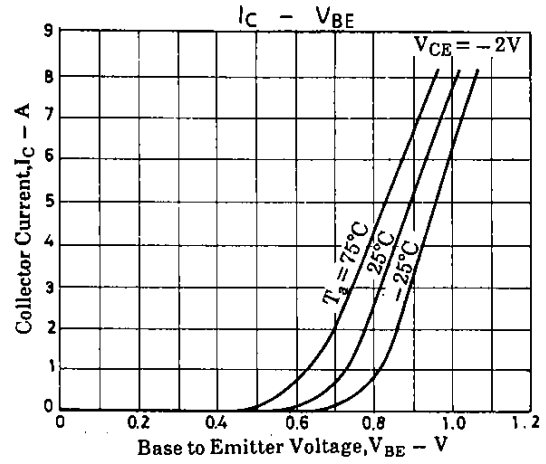
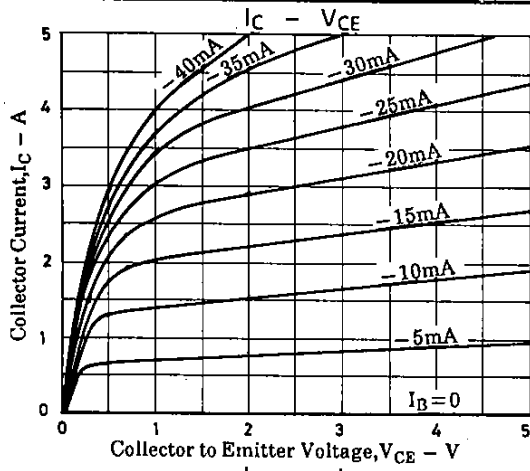
**Package Dimensions 2045B**

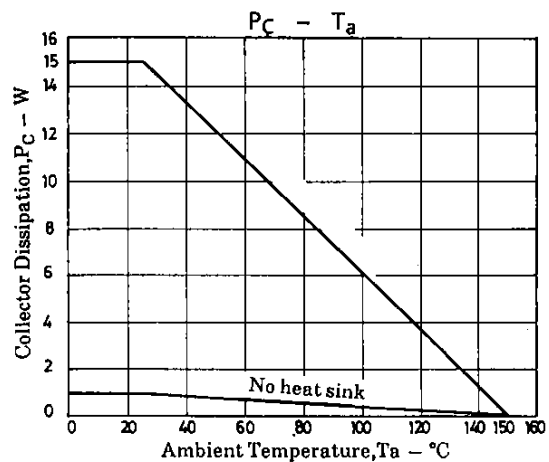
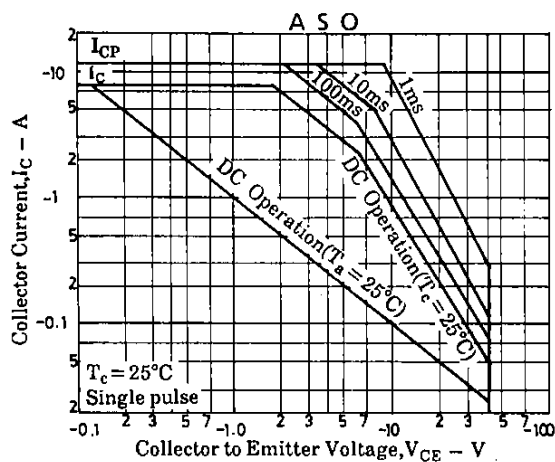


**Package Dimensions 2044B**



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