

SANYO	No.3132	2SA1728
	PNP Epitaxial Planar Silicon Transistor	
High-Speed Switching Applications		

Features

- Adoption of FBET process
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Small-sized package

Absolute Maximum Ratings at Ta = 25°C

			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	-500	mA
Collector Current(Pulse)	I _{CP}	-1	A
Collector Dissipation	P _C	200	mW
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 _{CBO}	V _{CB} = -40V, I _E = 0			-0.5	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} = -3V, I _C = 0			-0.5	μA
DC Current Gain	h _{FE} (1)	V _{CE} = -2V, I _C = -50mA	70※		280※	
	h _{FE} (2)	V _{CE} = -2V, I _C = -500mA	25			
Gain-Bandwidth Product	f _T	V _{CE} = -2V, I _C = -50mA		350		MHz
Output Capacitance	c _{ob}	V _{CB} = -10V, f = 1MHz		6		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = -200mA, I _B = -10mA	-0.2	-0.5		V
B-E Saturation Voltage	V _{BE(sat)}	I _C = -200mA, I _B = -10mA	-0.8	-1.2		V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = -10μA, 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 = -10μA, I _C = 0	-5			V
Turn-ON Time	t _{on}	See specified Test Circuit.		60	120	ns
Storage Time	t _{stg}	"		120	220	ns
Turn-OFF Time	t _{off}	"		170	320	ns

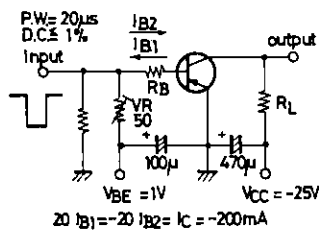
※ : The 2SA1728 is classified by 50mA h_{FE} as follows :

70	3	140	100	4	200	140	5	280
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Marking : DS

h_{FE} rank : 3,4,5

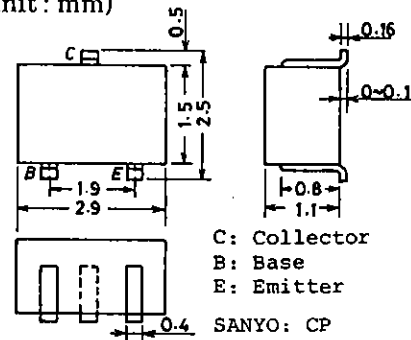
Switching Time Test Circuit

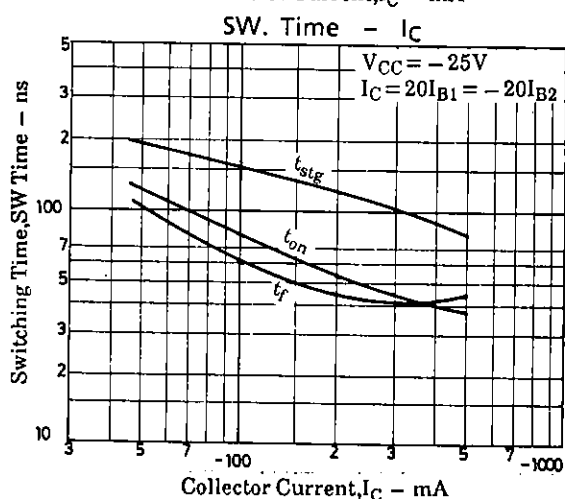
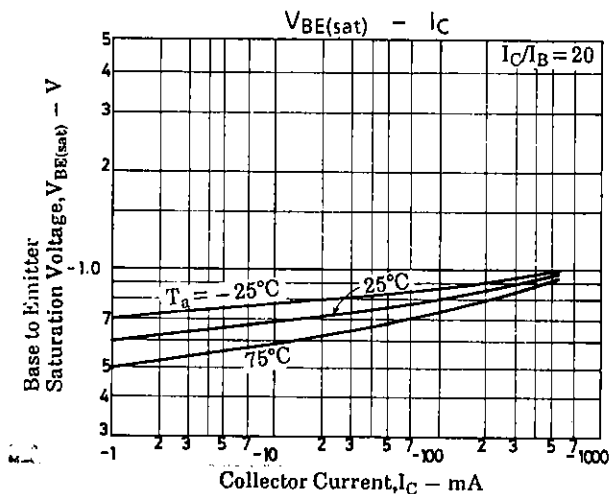
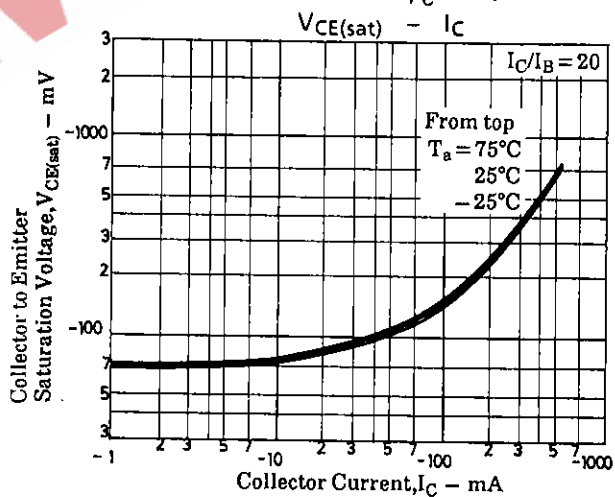
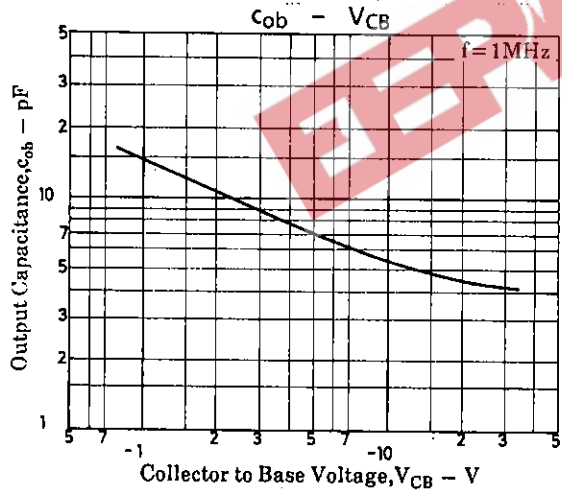
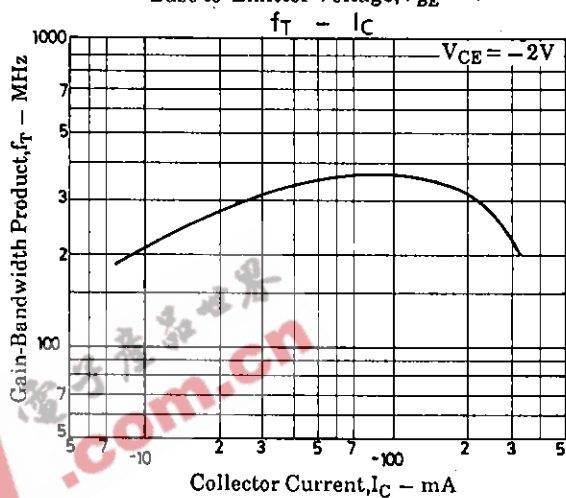
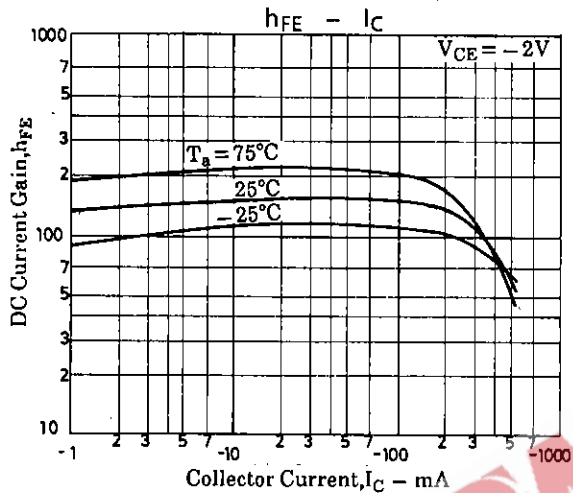
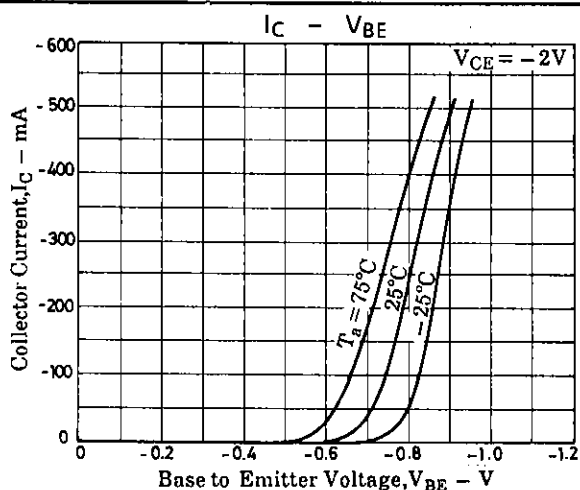
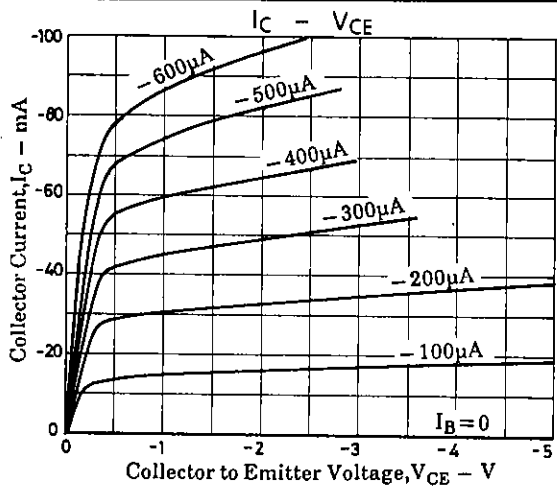


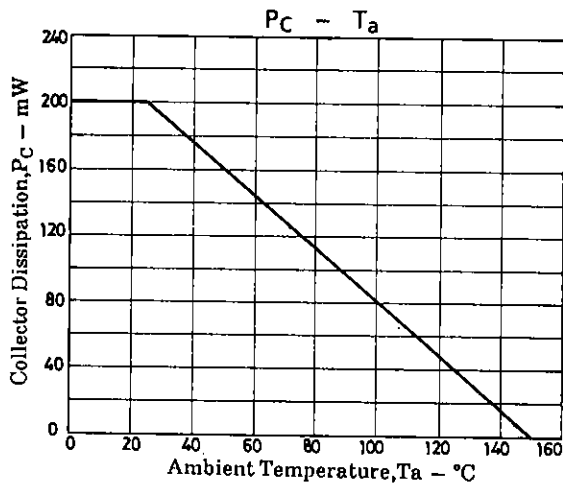
Unit (Resistance : Ω, Capacitance : F)

Package Dimensions 2018A

(unit : mm)







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