

SANYO

No.3182B

2SA1766

PNP Epitaxial Planar Silicon Transistor
 High h_{FE} , Low-Frequency
 General-Purpose Amp Applications

Features

- Adoption of FBET, MBIT processes
- High DC current gain ($h_{FE} = 500$ to 1200)
- Large current capacity
- Low collector-to-emitter saturation voltage
- High V_{EBO}

Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

			unit
Collector to Base Voltage	V_{CBO}	-30	V
Collector to Emitter Voltage	V_{CEO}	-25	V
Emitter to Base Voltage	V_{EBO}	-15	V
Collector Current	I_C	-300	mA
Collector Current(Pulse)	I_{CP}	-500	mA
Base Current	I_B	-60	mA
Collector Dissipation	P_C	Mounted on ceramic board ($250\text{mm}^2 \times 0.8\text{mm}$)	1.3 W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

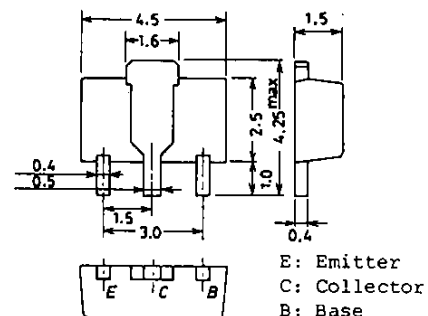
Electrical Characteristics at $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = -20\text{V}, I_E = 0$			-0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = -10\text{V}, I_C = 0$			-0.1	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = -5\text{V}, I_C = -10\text{mA}$	500	800	1200	
	$h_{FE}(2)$	$V_{CE} = -5\text{V}, I_C = -200\text{mA}$	200			
Gain-Bandwidth Product	f_T	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$		100		MHz
Output Capacitance	c_{ob}	$V_{CB} = -10\text{V}, f = 1\text{MHz}$		12		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = -200\text{mA}, I_B = -4\text{mA}$	-0.12	-0.50		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = -200\text{mA}, I_B = -4\text{mA}$	-0.77	-1.10		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -10\mu\text{A}, I_E = 0$	-30			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, R_{BE} = \infty$	-25			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -10\mu\text{A}, I_C = 0$	-15			V

Marking : AL

Package Dimensions 2038

(unit: mm)



E: Emitter
 C: Collector
 B: Base

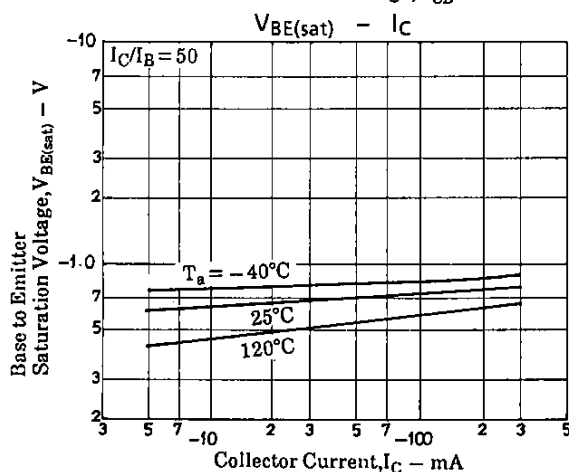
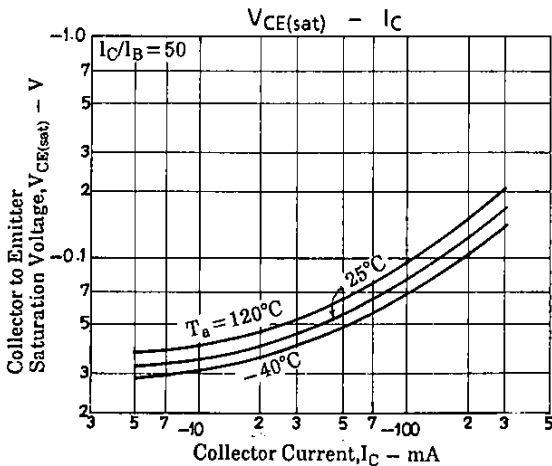
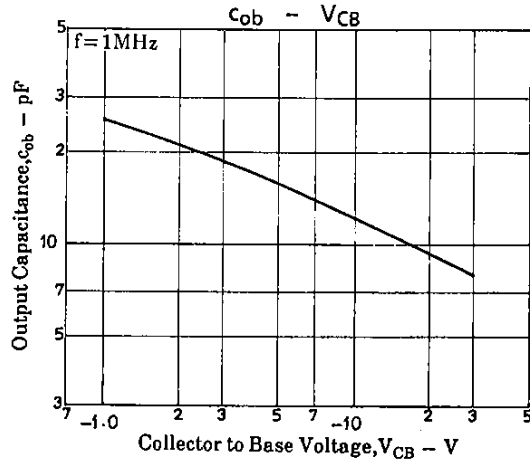
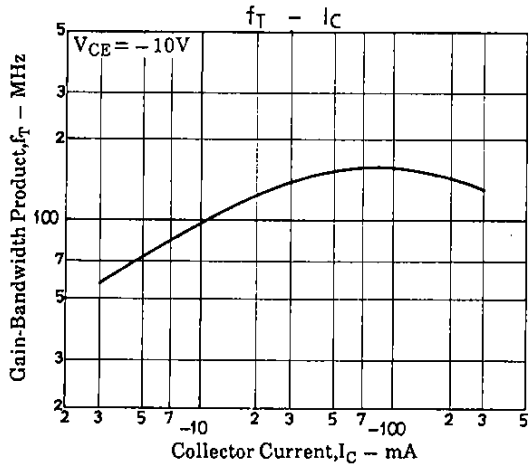
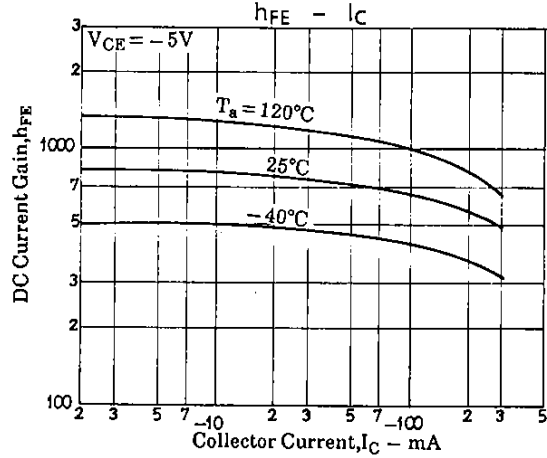
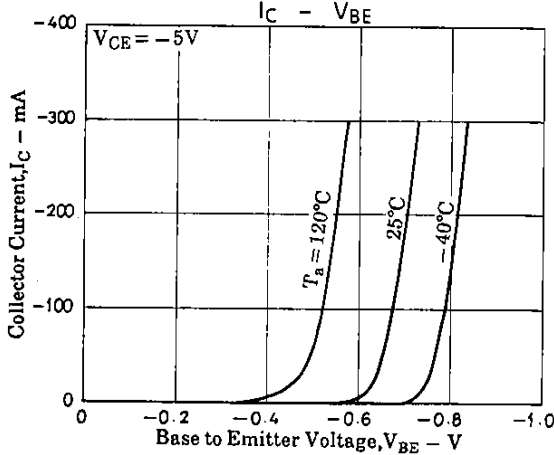
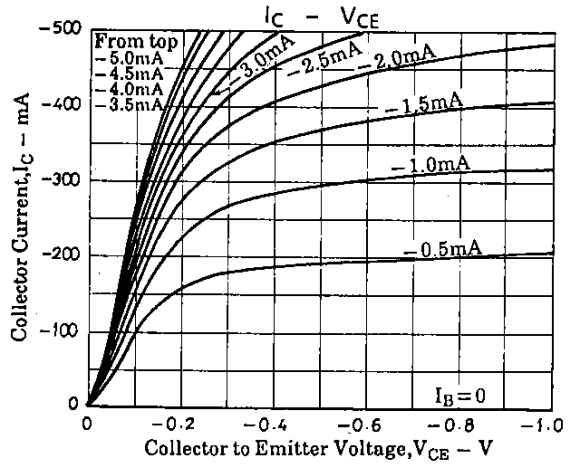
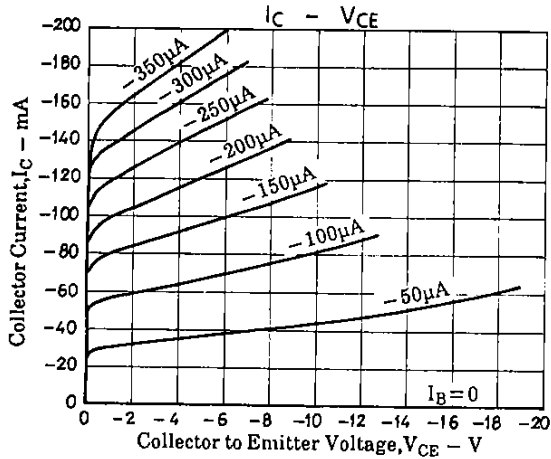
SANYO: PCP

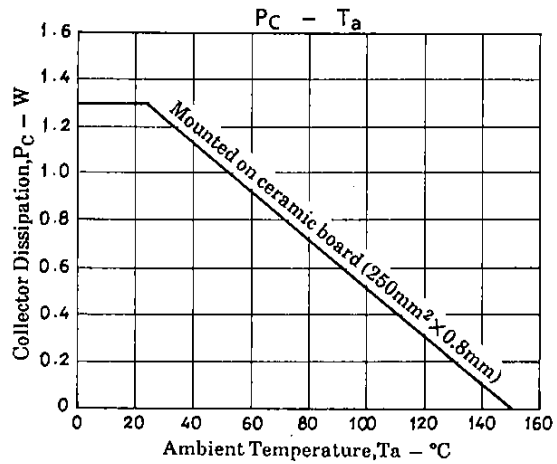
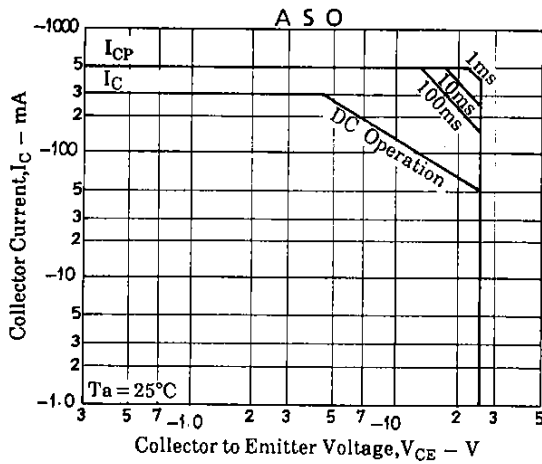
(Bottom View)

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