

SANYO	No.2911	2SB1396
		PNP Epitaxial Planar Silicon Transistor
DC-DC Converter, Motor Driver Applications		

Features

- Adoption of FBET, MBIT processes
- Large current capacity
- Low collector to emitter saturation voltage
- Small size making it easy to provide high-density, small-sized hybrid ICs

Absolute Maximum Ratings at Ta = 25°C

			unit
Collector to Base Voltage	V _{CB0}	-15	V
Collector to Emitter Voltage	V _{CEO}	-10	V
Emitter to Base Voltage	V _{EBO}	-7	V
Collector Current	I _C	-3	A
Collector Current(Pulse)	I _{CP}	-5	A
Collector Dissipation	P _C	Mounted on ceramic PCB (250mm ² × 0.8mm)	1.3 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} = -12V, I _E = 0			-100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} = -6V, I _C = 0			-100	nA
DC Current Gain	h _{FE(1)}	V _{CE} = -2V, I _C = -0.5A	*140		*560	
	h _{FE(2)}	V _{CE} = -2V, I _C = -3A	70			
Gain-Bandwidth Product	f _T	V _{CE} = -2V, I _C = -0.3A		400		MHz
Output Capacitance	c _{ob}	V _{CB} = -10V, f = 1MHz		26		pF
C-E Saturation Voltage	V _{CE(sat)}	I _C = -1.5A, I _B = -30mA	-220	-400		mV
B-E Saturation Voltage	V _{BE(sat)}	I _C = -1.5A, I _B = -30mA	-0.9	-1.2		V
C-B Breakdown Voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-15			V
C-E Breakdown Voltage	V _{(BR)CEO}	I _C = -1mA, R _{BE} = ∞	-10			V
E-B Breakdown Voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0	-7			V

* : The 2SB1396 is classified by 0.5A h_{FE} as follows:

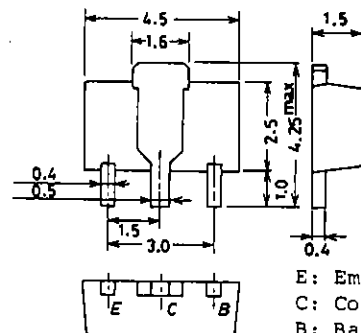
140	S	280	200	T	400	280	U	560
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Marking : BO

h_{FE} rank : S,T,U

Package Dimensions 2038

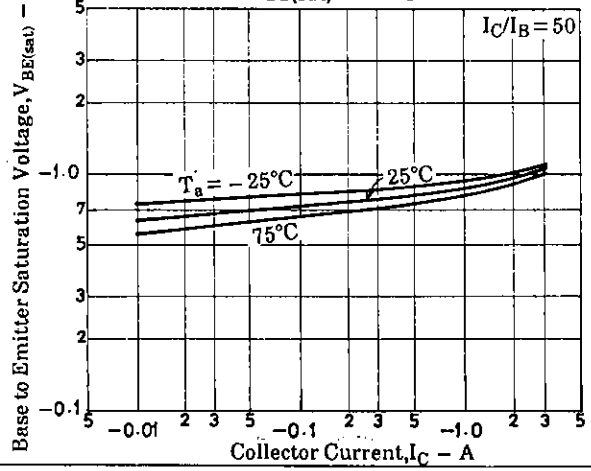
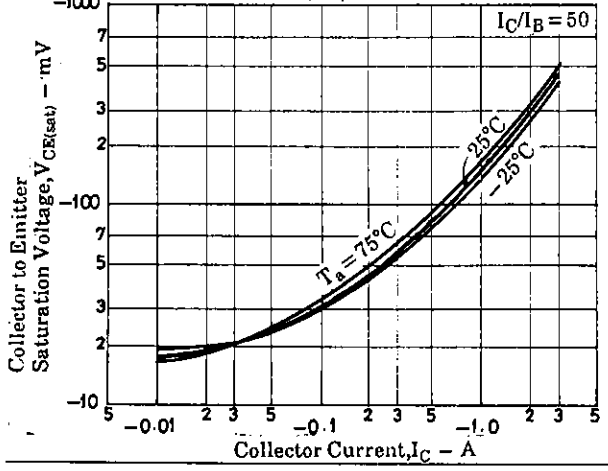
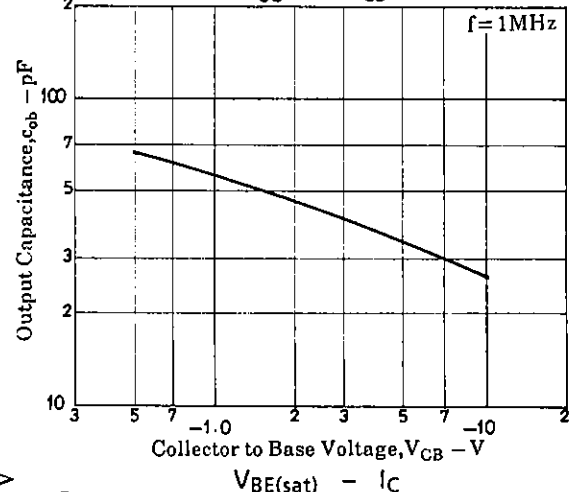
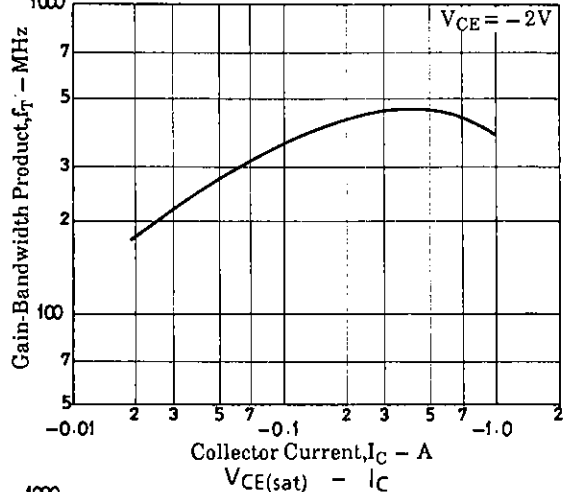
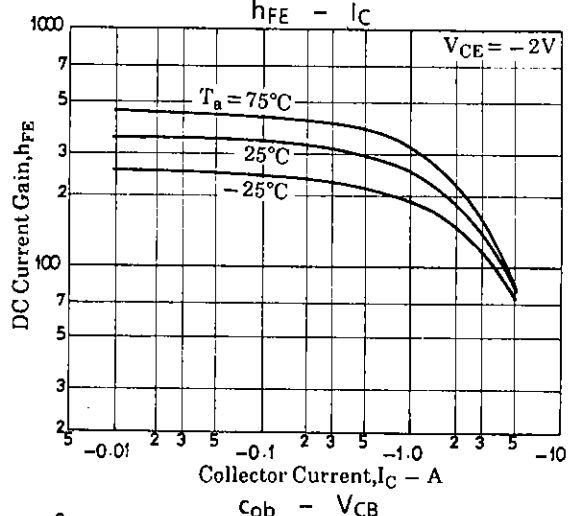
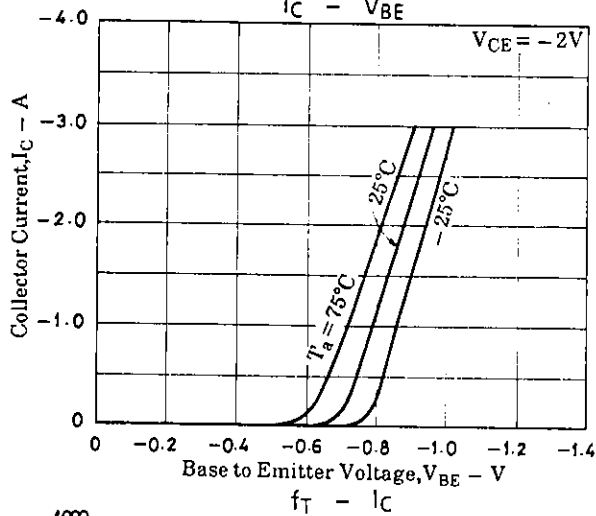
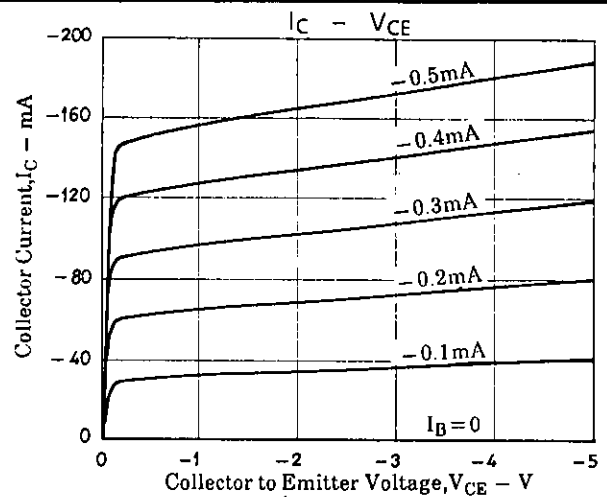
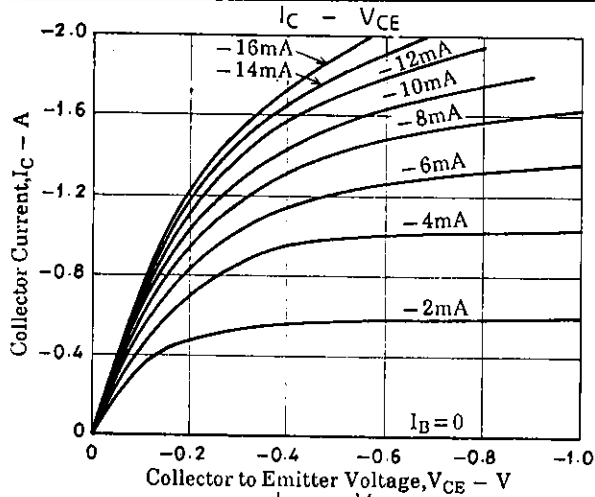
(unit : mm)

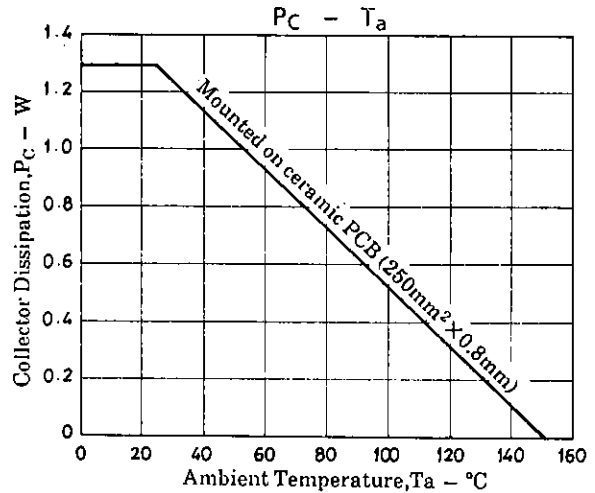
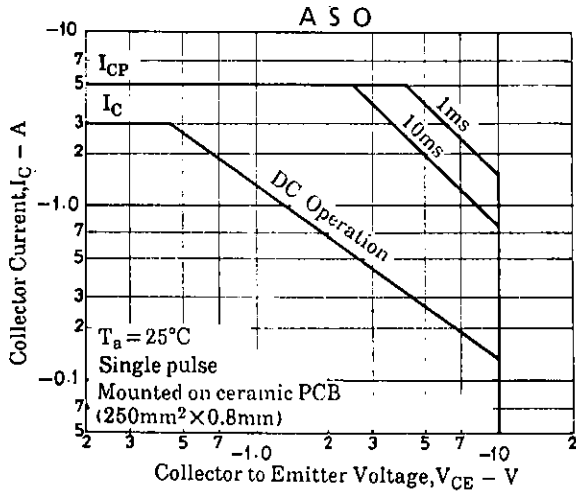


E: Emitter
C: Collector
B: Base

SANYO: PCP
(Bottom View)

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