



No.1244C

2SB985/2SD1347

PNP/NPN Epitaxial Planar Silicon Transistors

Large-Current Driving Applications

Applications

- Power Supplies, relay drivers, lamp drivers, electrical equipment

Features

- Adoption of FBET, MBIT processes
- Low saturation voltage
- Large current capacity and wide ASO

() : 2SB985

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

			unit
Collector to Base Voltage	V_{CB0}	(-)60	V
Collector to Emitter Voltage	V_{CE0}	(-)50	V
Emitter to Base Voltage	V_{EB0}	(-)6	V
Collector Current	I_C	(-)3	A
Collector Current(Pulse)	I_{CP}	(-)6	A
Collector Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

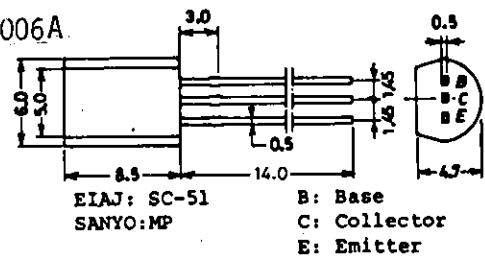
Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Collector Cutoff Current	V_{CB0}	$V_{CB}=(-)40\text{V}, I_E=0$			(-)1.0	μA
Emitter Cutoff Current	V_{EB0}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)1.0	μA
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)2\text{V}, I_C=(-)100\text{mA}$	100*		560*	
				40		
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$		150		MHz
Output Capacitance	c_{ob}	$V_{CB}=(-)10\text{V}, f=1\text{MHz}$		25		pF
				(39)		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)2\text{A}, I_B=(-)100\text{mA}$, Pulse	0.19	0.5		V
				(-0.35)(-0.7)		
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)2\text{A}, I_B=(-)100\text{mA}$, Pulse	(-)0.94	(-)1.2		V
Collector to Base Breakdown Voltage	$V_{(BR)CB0}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)60			V
Collector to Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=(-)1\text{mA}, R_{BE}=\infty$	(-)50			V
Emitter to Base Breakdown Voltage	$V_{(BR)EB0}$	$I_E=(-)10\mu\text{A}, I_C=0$	(-)6			V

*The 2SB985/2SD1347 are classified by 100mA h_{FE} as follows :

100	R	200	140	S	280	200	T	400	280	U	560
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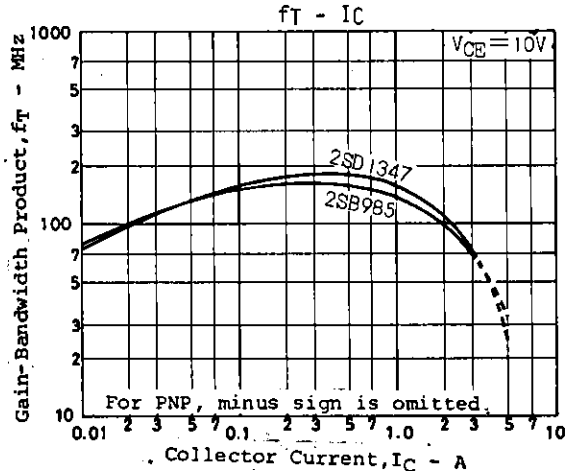
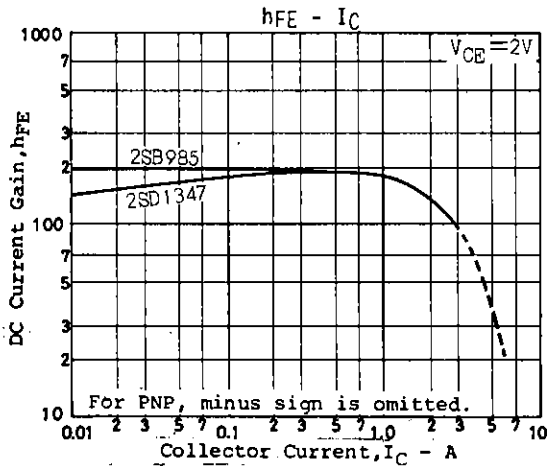
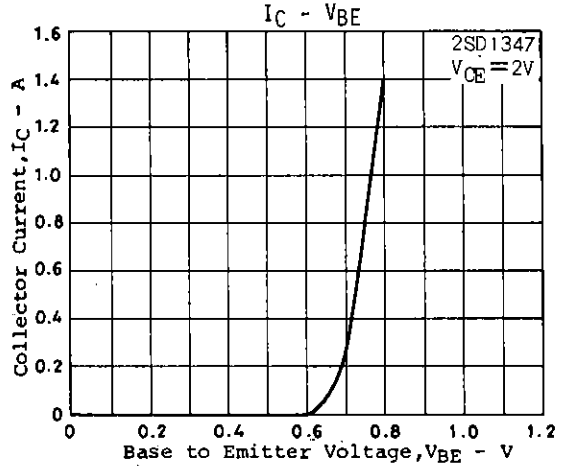
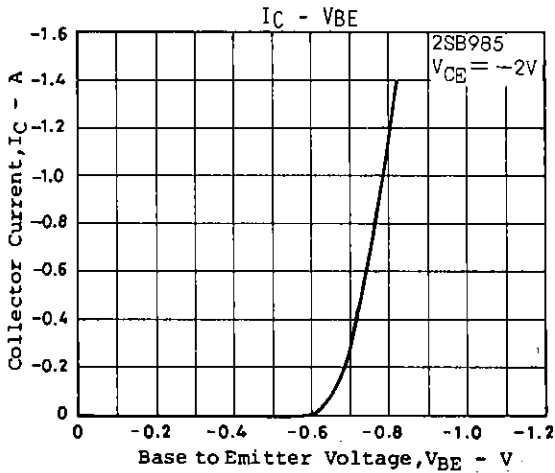
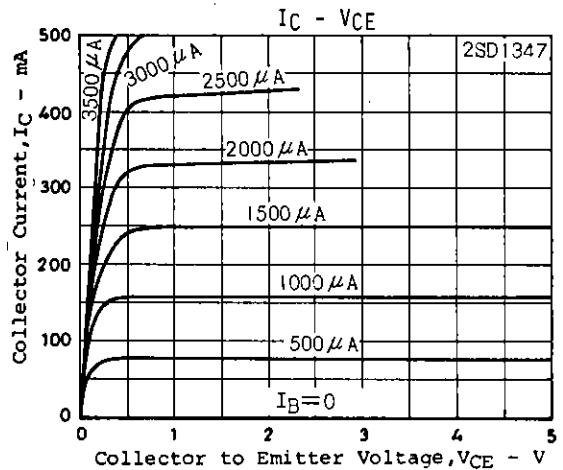
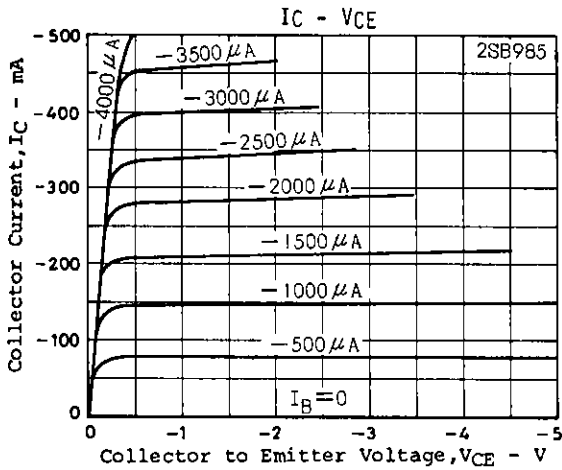
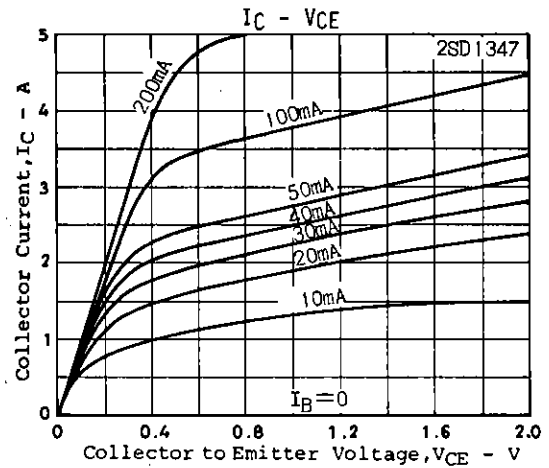
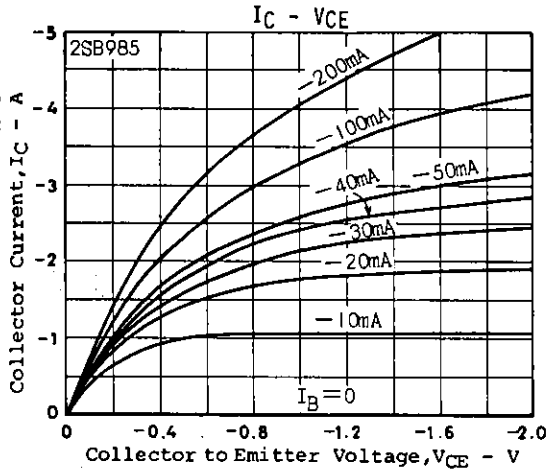
Package Dimensions 2006A (unit: mm)



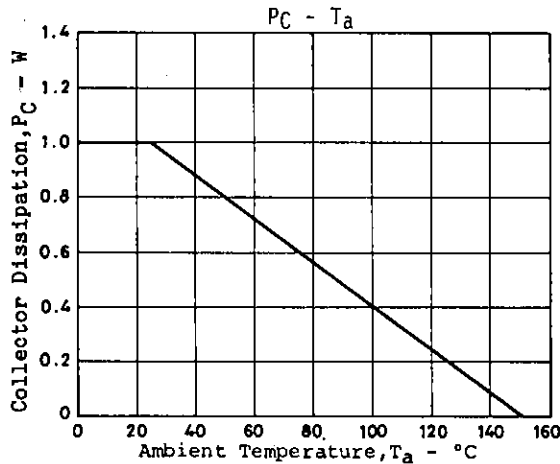
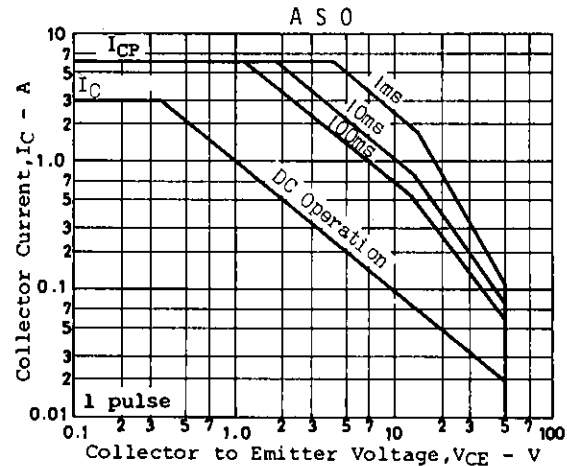
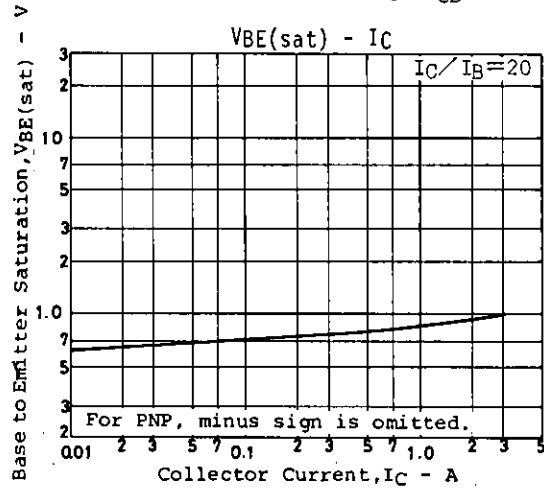
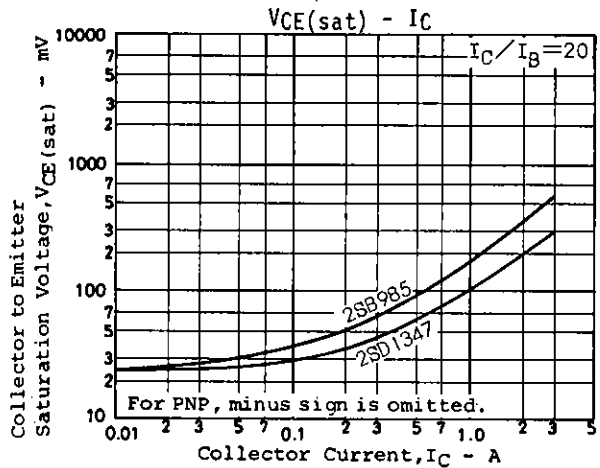
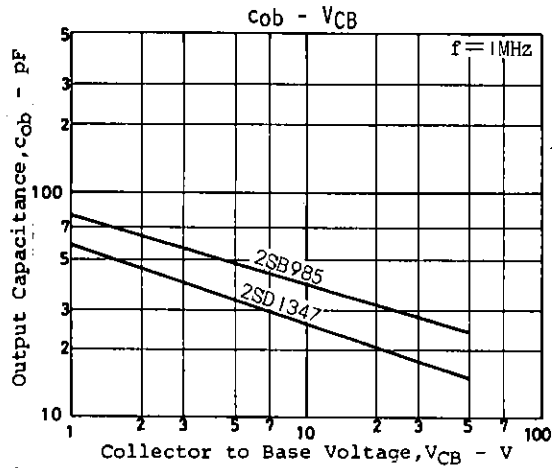
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