

<b>SANYO</b>	No.1244C	<b>2SB985/2SD1347</b>
		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	$^\circ\text{C}$

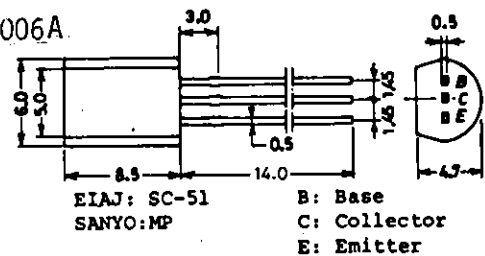
**Electrical Characteristics at  $T_a=25^\circ\text{C}$**

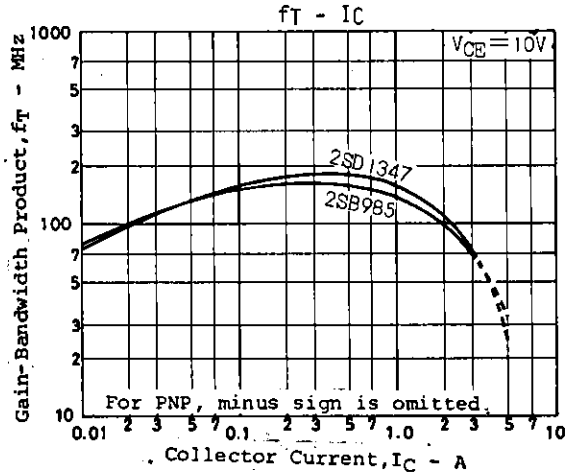
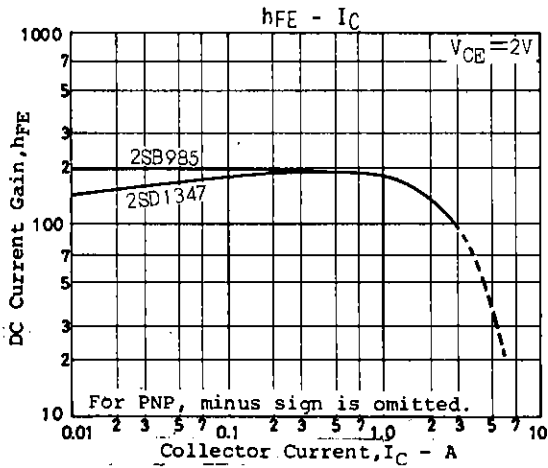
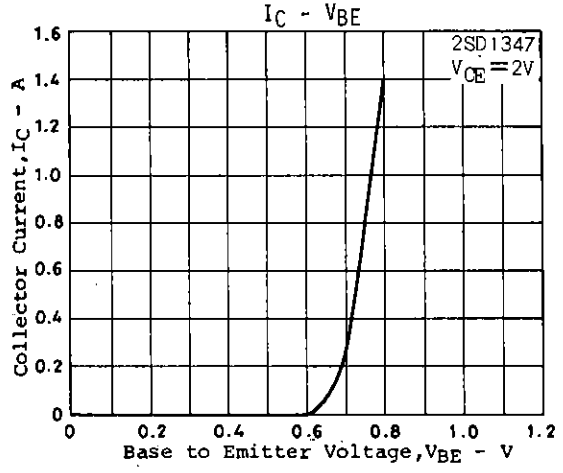
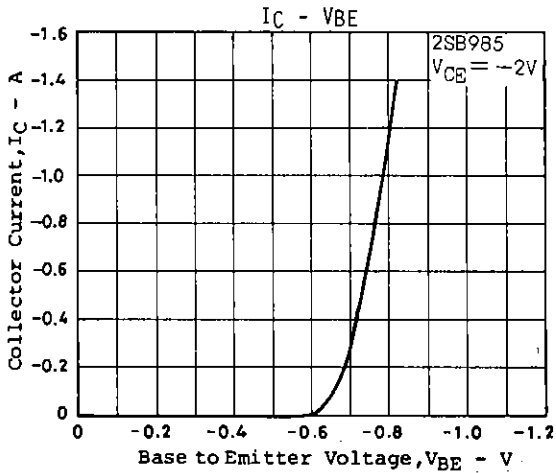
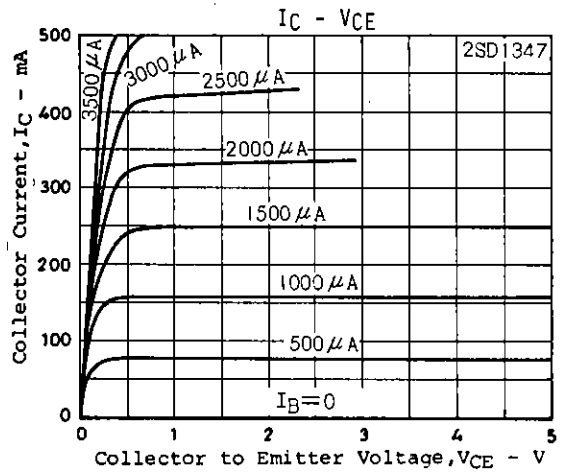
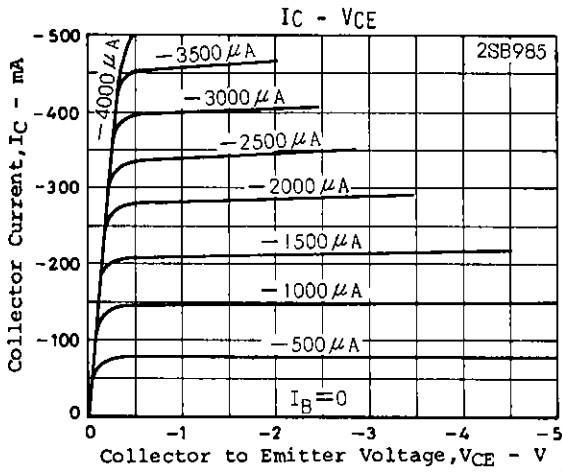
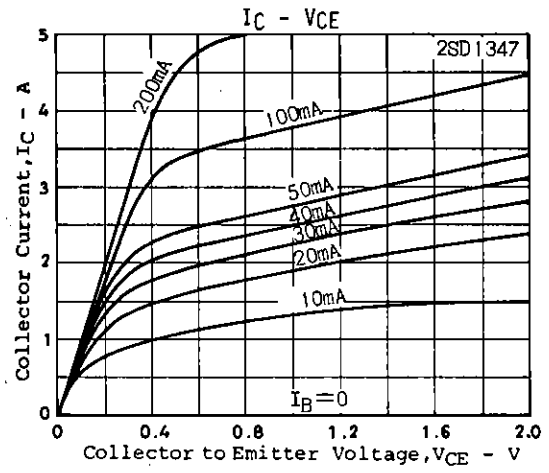
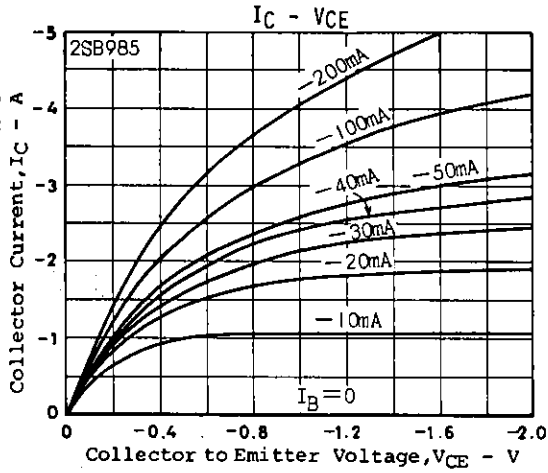
			min	typ	max	unit
Collector Cutoff Current	$V_{CB0}$	$V_{CB}=(-)40\text{V}, I_E=0$		(-)1.0		$\mu\text{A}$
Emitter Cutoff Current	$V_{EB0}$	$V_{EB}=(-)4\text{V}, I_C=0$		(-)1.0		$\mu\text{A}$
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)2\text{V}, I_C=(-)100\text{mA}$	100*		560*	
	$h_{FE}(2)$	$V_{CE}=(-)2\text{V}, I_C=(-)3\text{A}$	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

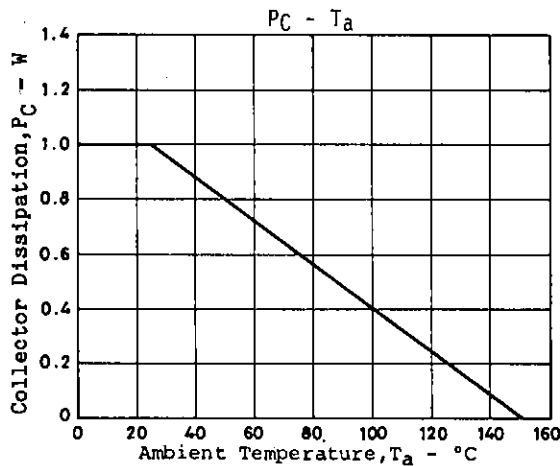
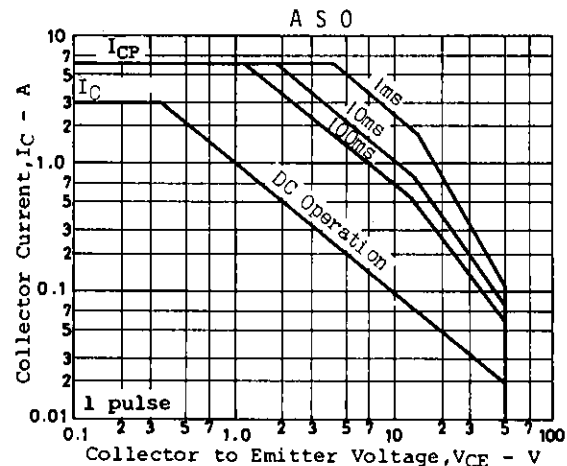
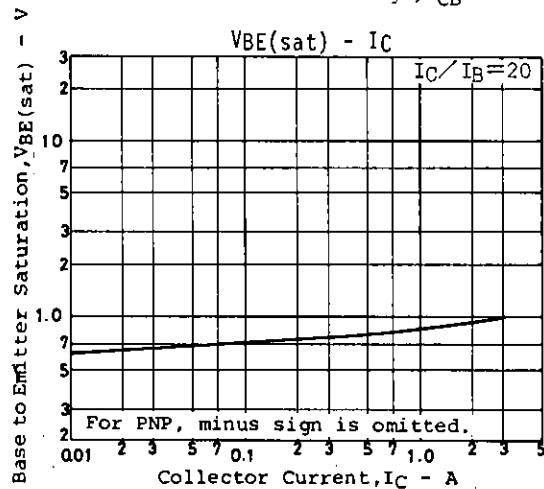
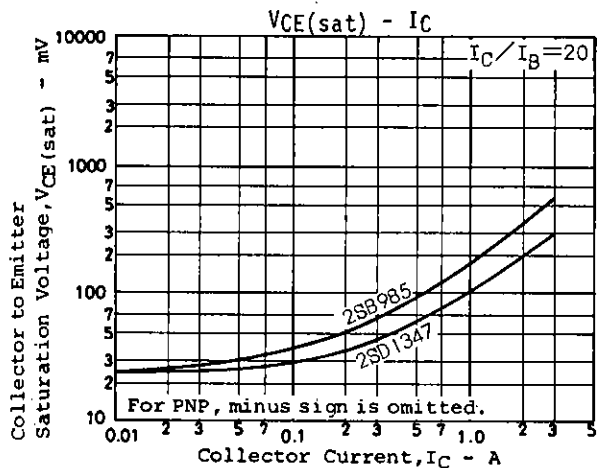
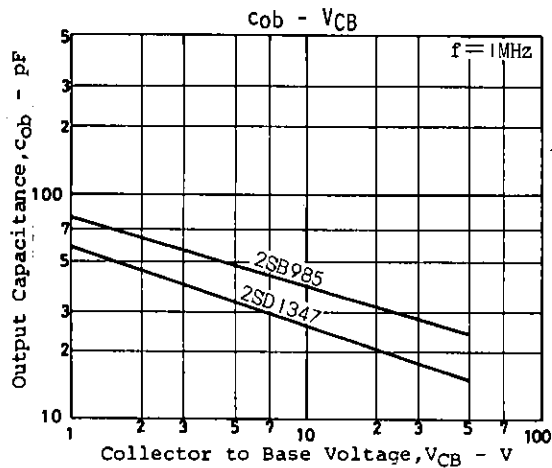
\*The 2SB985/2SD1347 are classified by 100mA  $h_{FE}$  as follows :

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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