

<b>SANYO</b>	No.1029C	<b>2SB927/2SD1247</b>
		PNP/NPN Epitaxial Planar Silicon Transistors
<b>Large-Current Driving Applications</b>		

**Applications**

- . Power supplies, relay drivers, lamp drivers, electrical equipment

**Features**

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

( ) : 2SB927

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

			unit
Collector to Base Voltage	$V_{CB0}$	(-) 30	V
Collector to Emitter Voltage	$V_{CEO}$	(-) 25	V
Emitter to Base Voltage	$V_{EBO}$	(-) 6	V
Collector Current	$I_C$	(-) 2.5	A
Collector Current(Pulse)	$I_{CP}$	(-) 5	A
Collector Dissipation	$P_C$	1.0	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

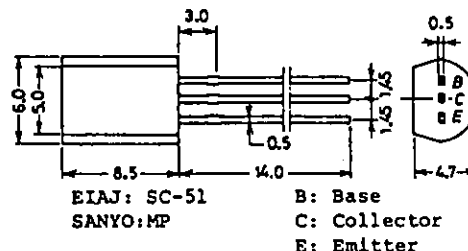
**Electrical Characteristics at  $T_a=25^\circ\text{C}$**

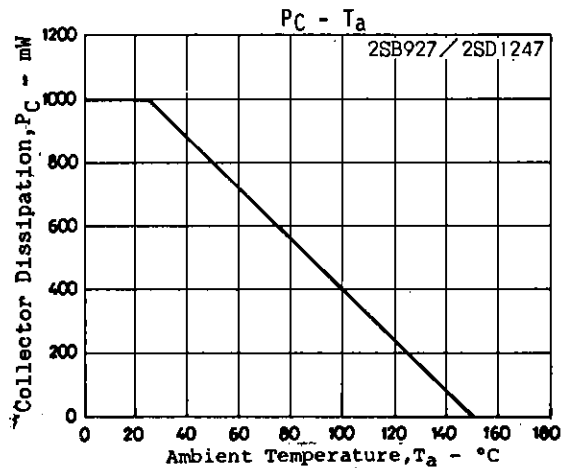
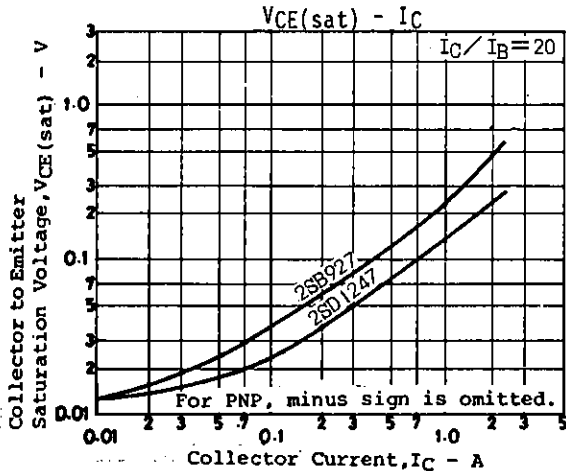
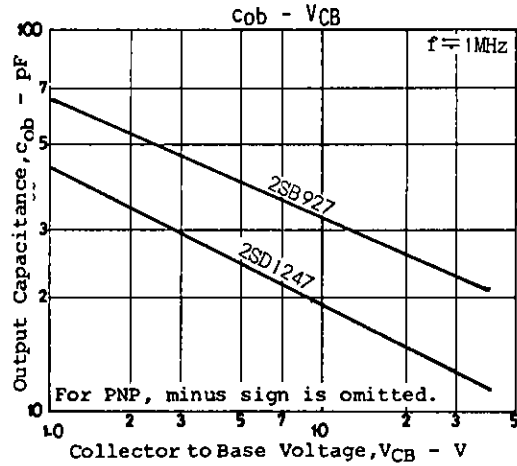
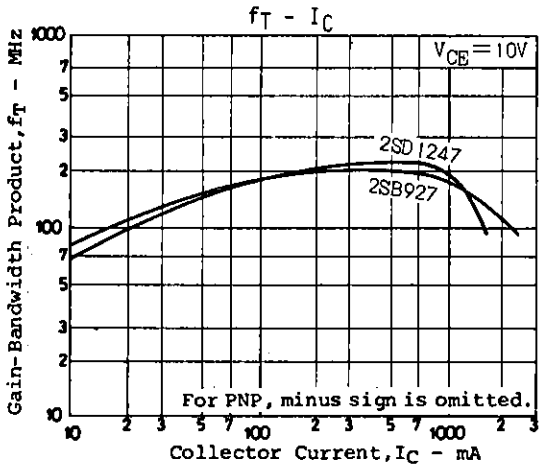
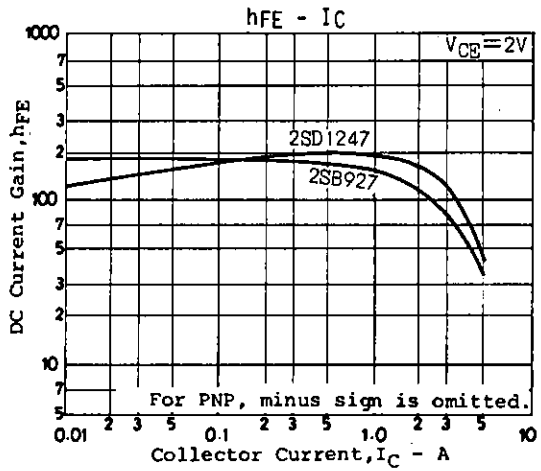
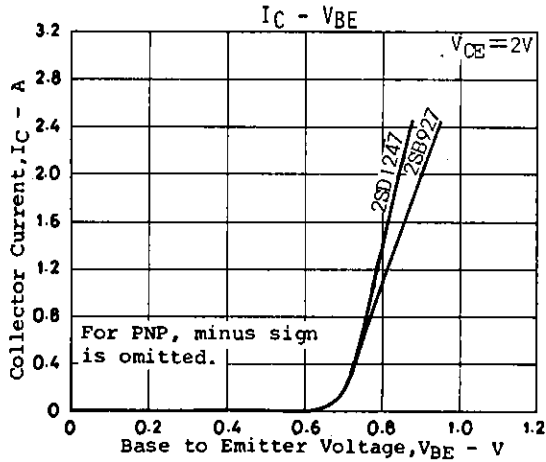
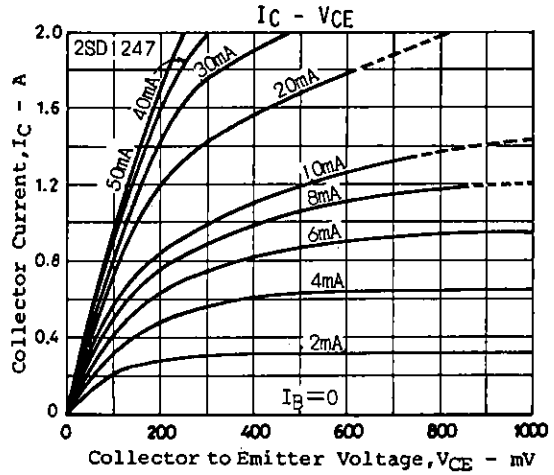
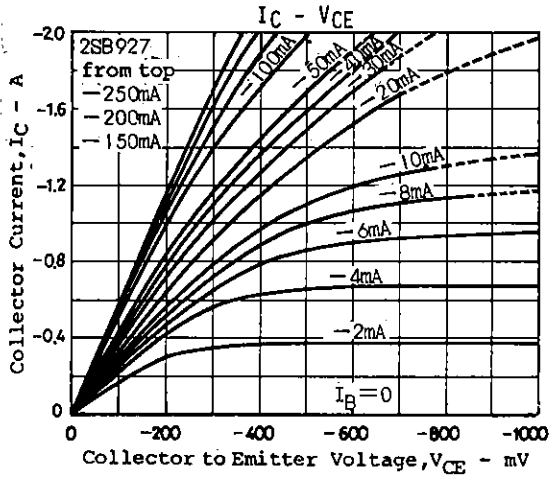
			min	typ	max	unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = (-) 20\text{V}, I_E = 0$			(-) 0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = (-) 4\text{V}, I_C = 0$			(-) 0.1	$\mu\text{A}$
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-) 2\text{V}, I_C = (-) 0.1\text{A}$	100*		560*	
	$h_{FE(2)}$	$V_{CE} = (-) 2\text{V}, I_C = (-) 1.5\text{A}$	65	130		
Gain-Bandwidth Product	$f_T$	$V_{CE} = (-) 10\text{V}, I_C = (-) 50\text{mA}$		150		MHz
Common Base Output Capacitance	$C_{ob}$	$V_{CB} = (-) 10\text{V}, f = 1\text{MHz}$		19		pF
				(32)		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = (-) 1.5\text{A}, I_B = (-) 75\text{mA}$	0.18	0.4		V
			(-0.35)	(-0.6)		
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = (-) 1.5\text{A}, I_B = (-) 75\text{mA}$	0.85	1.2		V

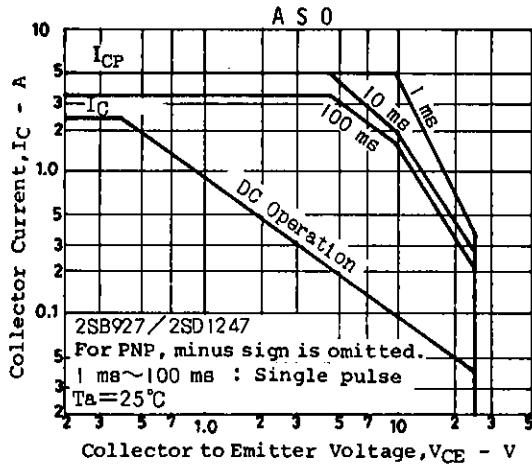
\* The 2SB927/2SD1247 are classified by 0.1A  $h_{FE}$  as follows :

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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