

SANYO	No.1029C	2SB927/2SD1247
		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

() : 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_{CE0}	(-) 25	V
Emitter to Base Voltage	V_{EB0}	(-) 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	$^\circ\text{C}$

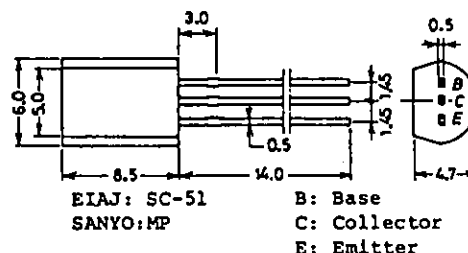
Electrical Characteristics at $T_a=25^\circ\text{C}$

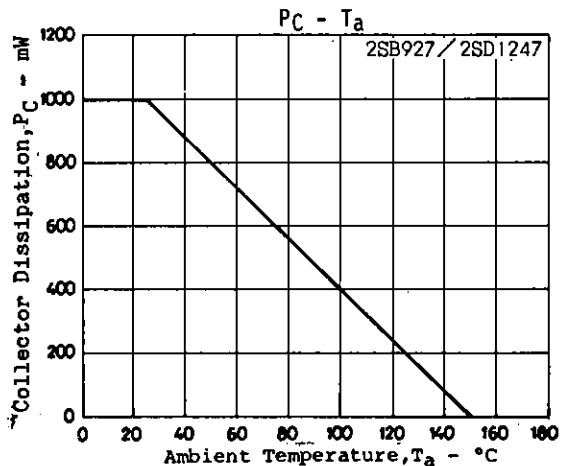
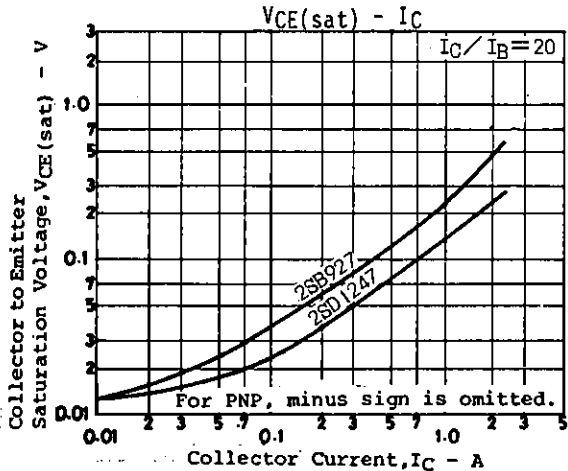
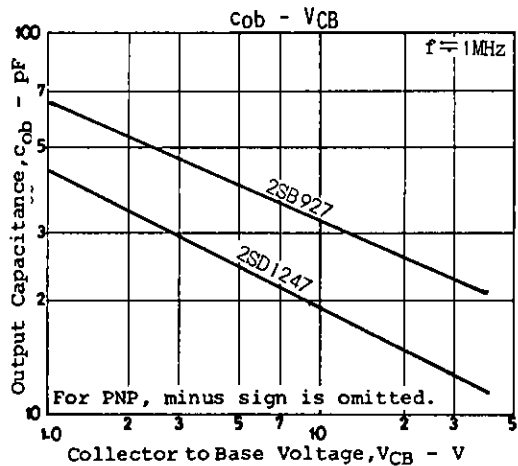
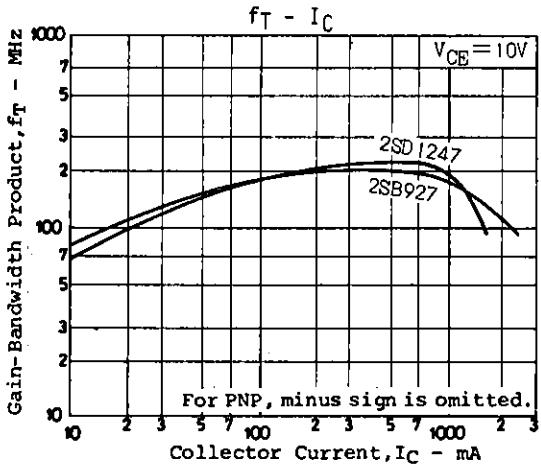
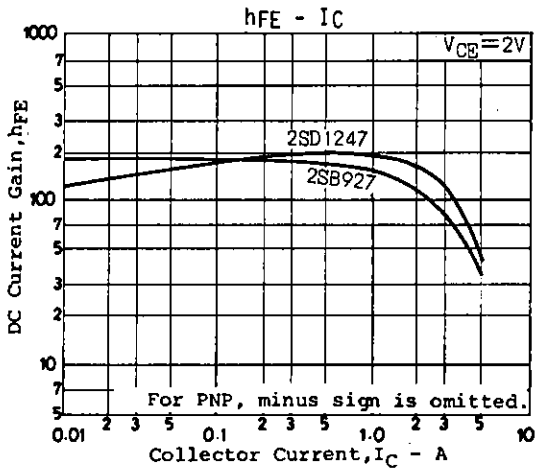
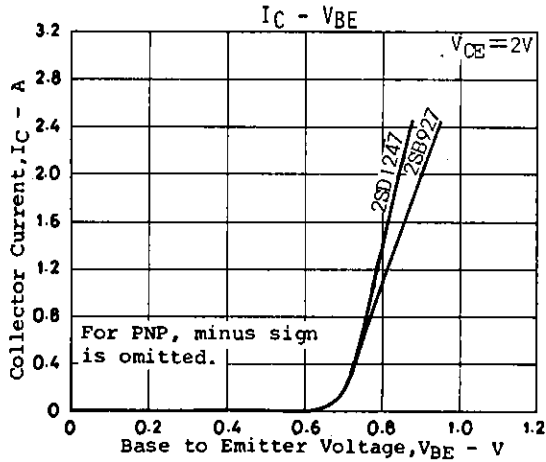
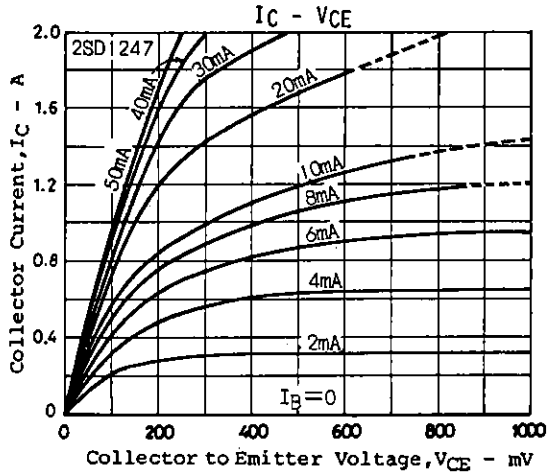
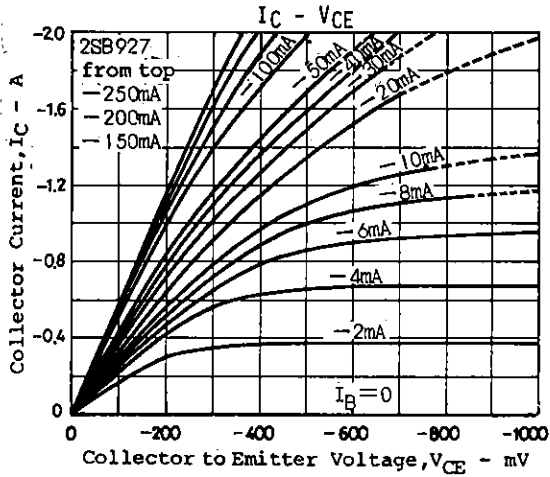
			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-) 20\text{V}, I_E = 0$			(-) 0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-) 4\text{V}, I_C = 0$			(-) 0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-) 2\text{V}, I_C = (-) 0.1\text{A}$	100*		560*	
	$h_{FE(2)}$	$V_{CE} = (-) 2\text{V}, I_C = (-) 1.5\text{A}$	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

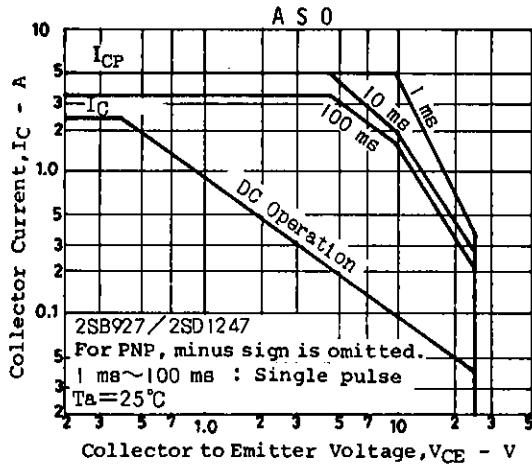
* The 2SB927/2SD1247 are classified by 0.1A h_{FE} as follows :

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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