

## 2SB927/2SD1247

# **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

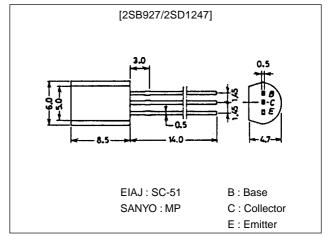
## **Specifications**

### Absolute Maximum Ratings at Ta = 25°C

## **Package Dimensions**

unit:mm

2006A

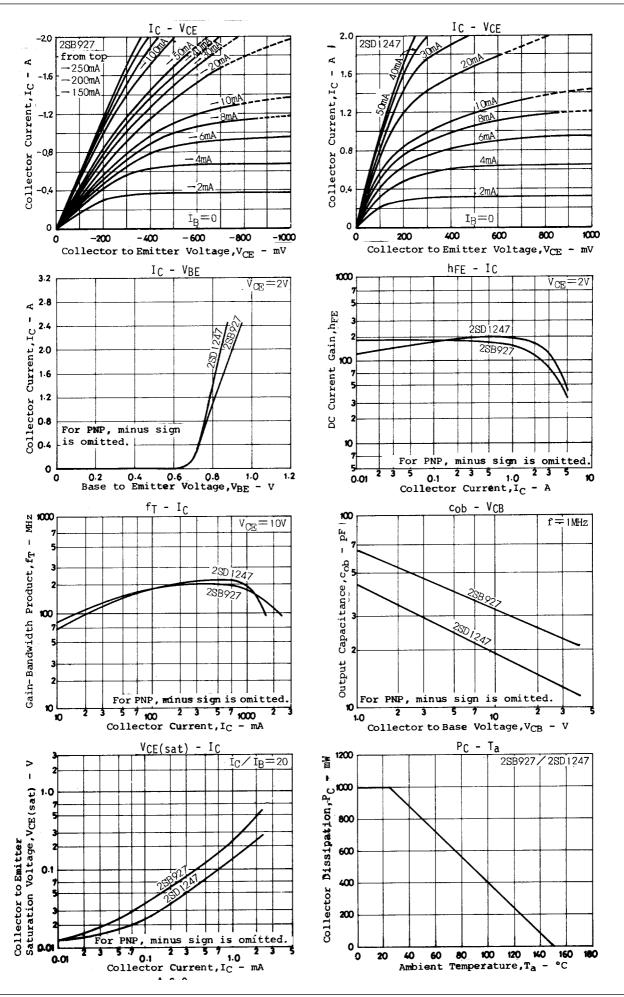


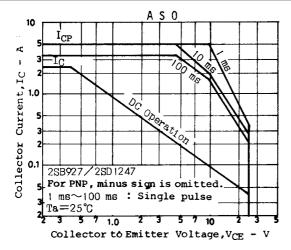
Parameter Symbol Conditions Ratings Unit Collector-to-Base Voltage **V**СВО (-)30 Collector-to-Emitter Voltage (-)25٧ **VCEO** Emitter-to-Base Voltage V<sub>EBO</sub> (-)6٧ Collector Current (-)2.5Α lС Collector Current (Pulse) Α (-)5ICP Collector Dissipation 1.0 W PC Junction Temperature 150 °C Τj Storage Temperature Tstg -55 to +150 Ĉ

#### Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	Ratings			Unit
	Symbol		min	typ	max	Oill
Collector Cutoff Current	ICBO	V <sub>CB</sub> =(-)20V, I <sub>E</sub> =0			(-)0.1	μA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =(-)4V, I <sub>C</sub> =0			(-)0.1	μA
DC Current Gain	h <sub>FE</sub> 1	V <sub>CE</sub> =(-)2V, I <sub>C</sub> =(-)0.1A	100*		560*	
	h <sub>FE</sub> 2	V <sub>CE</sub> =(-)2V, I <sub>C</sub> =(-)1.5A	65	130		
Gain-Bandwidth Product	fT	V <sub>CE</sub> =(-)10V, I <sub>C</sub> =(-)50mA		150		MHz
Common Base Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =(-)10V, f=1MHz		19(32)		pF
Collector-to-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =(-)1.5A, I <sub>B</sub> =(-)75mA		0.18	0.4	V
				(-0.35)	(-0.6)	V
Base-to-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =(-)1.5A, I <sub>B</sub> =(-)75mA		0.85	1.2	V

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