

查询"SD1801"供应商

No.2112B

SANYO**2SB1201/2SD1801**

PNP/NPN Epitaxial Planar Silicon Transistors

High-Current Switching Applications

Applications

- Voltage regulators, relay drivers, lamp drivers, electrical equipment

Features

- Adoption of FBET, MBIT processes
- Large current capacity and wide ASO
- Low collector-to-emitter saturation voltage
- Fast switching speed
- Small and slim package making it easy to make 2SB1201/2SD1801-used sets smaller

() : 2SB1201

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	(-)2	A
Collector Current(Pulse)	I_{CP}	(-)4	A
Collector Dissipation	P_C	0.8	W
		15	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)50\text{V}, I_E = 0$			(-)100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = (-)4\text{V}, I_C = 0$			(-)100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = (-)2\text{V}, I_C = (-)100\text{mA}$	100*		560*	
	$h_{FE(2)}$	$V_{CE} = (-)2\text{V}, I_C = (-)1.5\text{A}$	40			
Gain-Bandwidth Product	f_T	$V_{CE} = (-)10\text{V}, I_C = (-)50\text{mA}$		150		MHz
Output Capacitance	c_{ob}	$V_{CE} = (-)10\text{V}, f = 1\text{MHz}$		(22)12		pF
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)1\text{A}, I_B = (-)50\text{mA}$		0.15	0.4	V
				(-0.3)	(-0.7)	

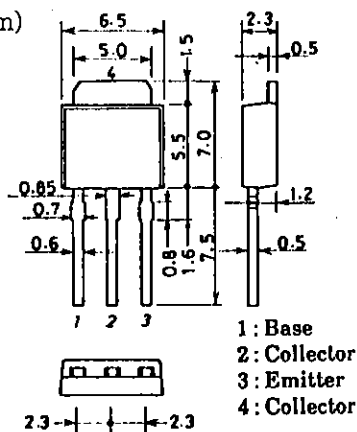
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* : The 2SB1201/2SD1801 are classified by 100mA h_{FE} as follows :

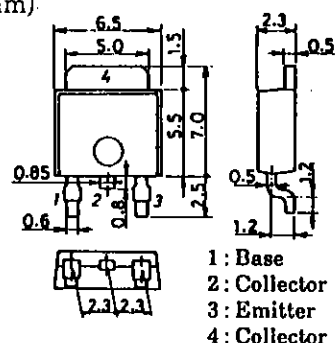
100	R	200	140	S	280	200	T	400	280	U	560
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Package Dimensions 2045B

(unit : mm)

**Package Dimensions 2044B**

(unit : mm)

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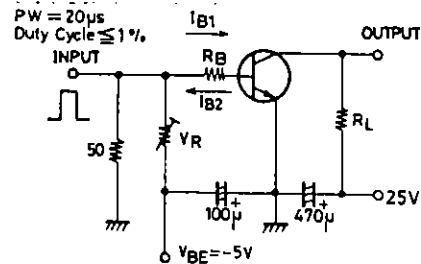
8259MO/4137KI/4076KI, TS No.2112-1/4

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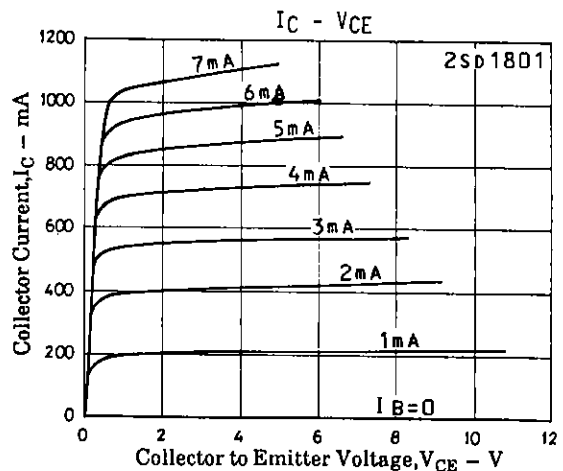
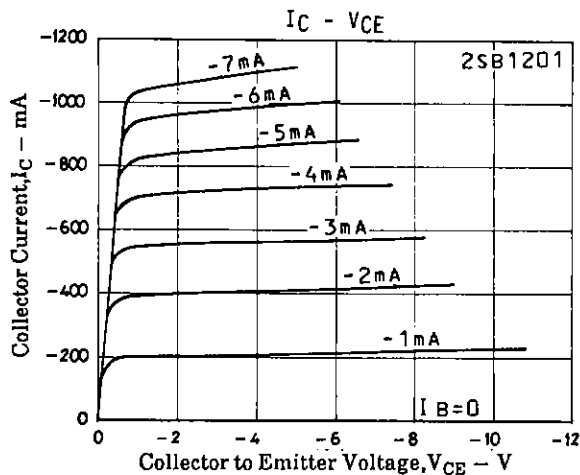
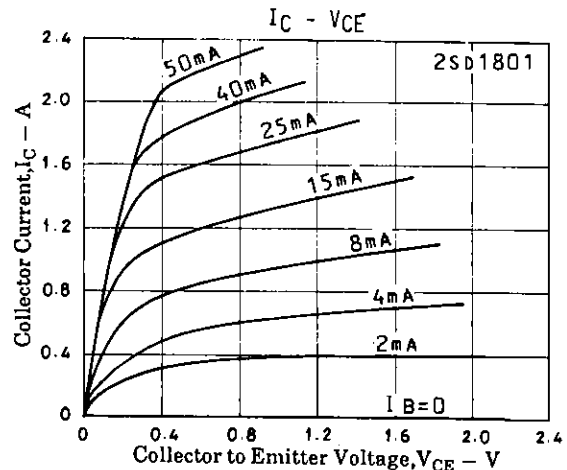
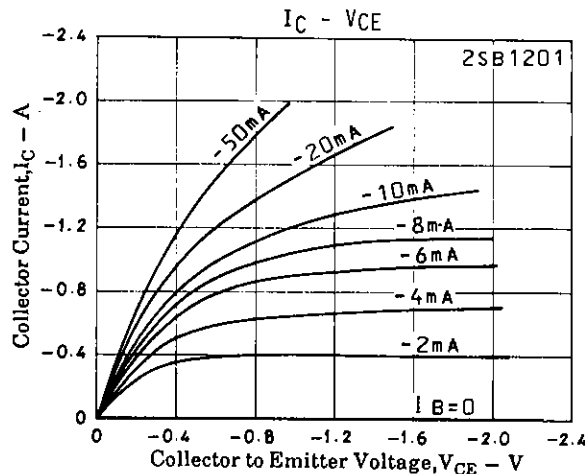
			min	typ	max	unit
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C = (-)1A, I_B = (-)50mA$		$(-)0.9$	$(-)1.2$	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu A, I_E = 0$	$(-)60$			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	$(-)50$			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)10\mu A, I_C = 0$	$(-)6$			V
Turn-on Time	t_{on}	See specified Test Circuit.		60		ns
Storage Time	t_{stg}			(450)550		ns
Fall Time	t_f			30		ns

Switching Time Test Circuit



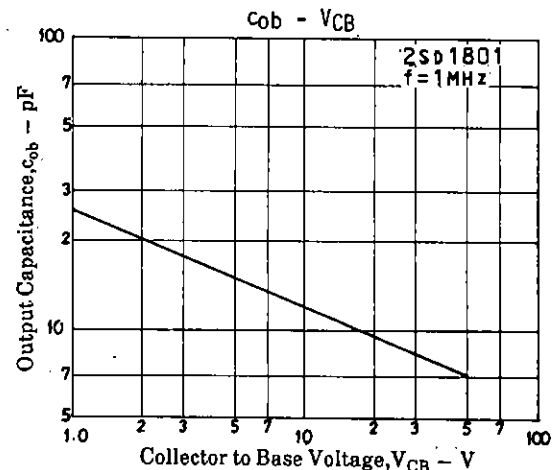
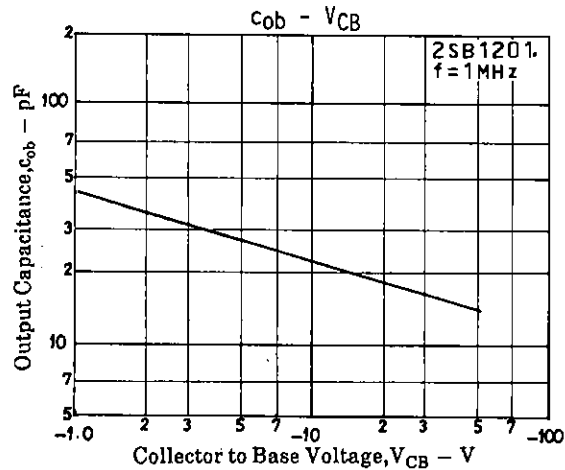
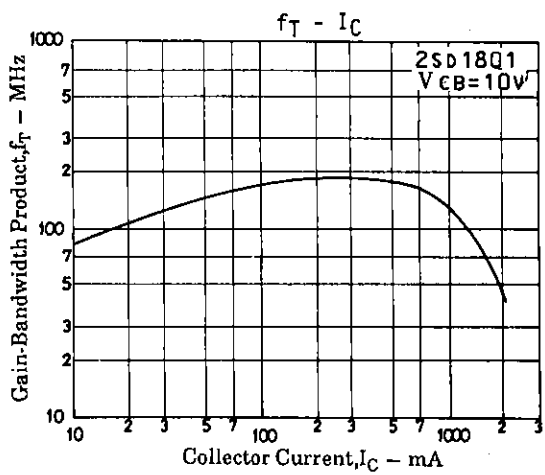
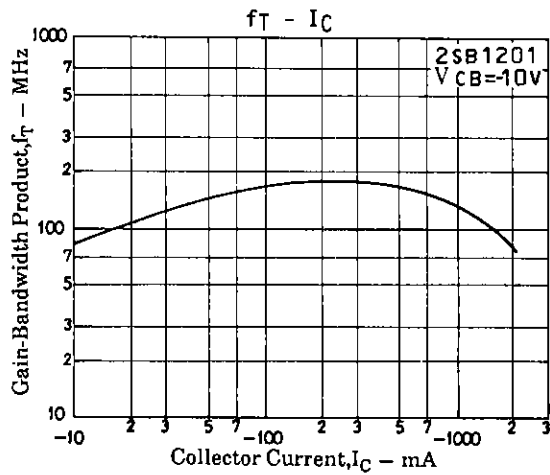
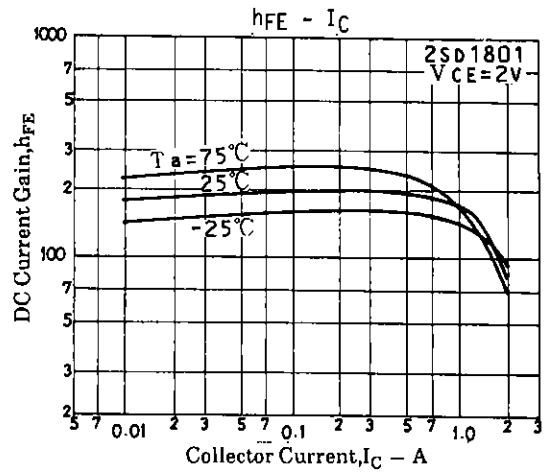
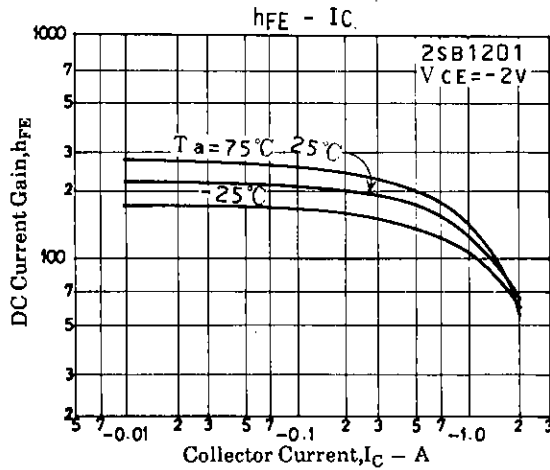
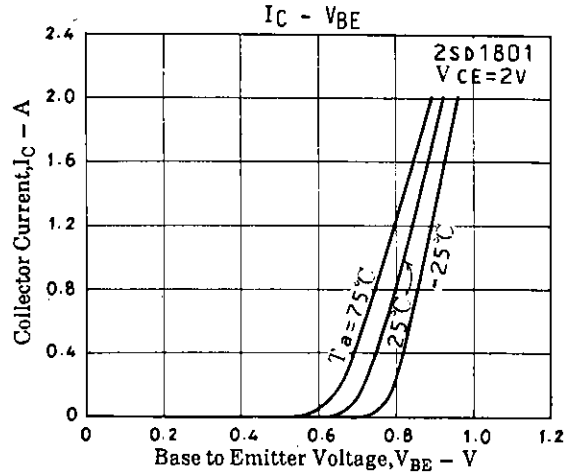
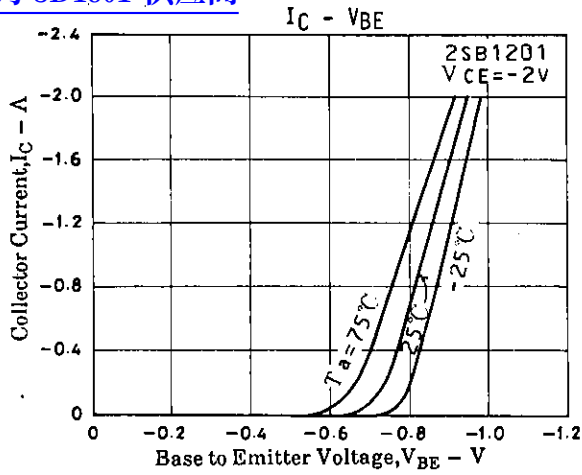
$I_C = 10, I_{B1} = -10, I_{B2} = 500mA, V_{CC} = 25V$
(For PNP, the polarity is reversed.)

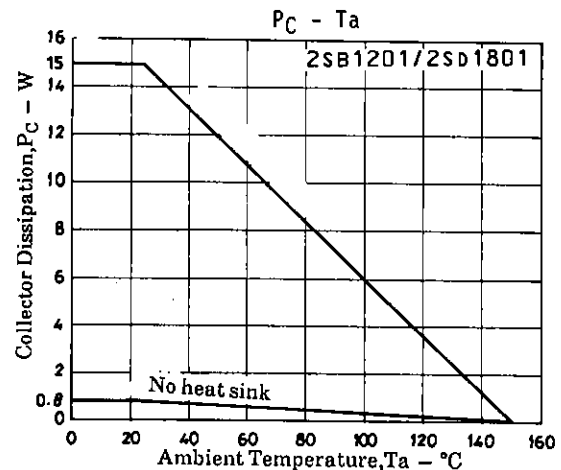
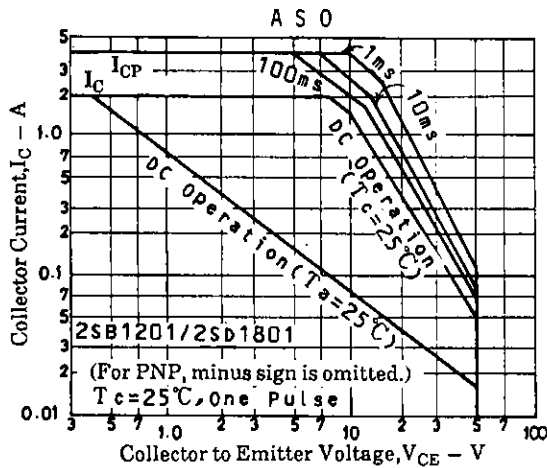
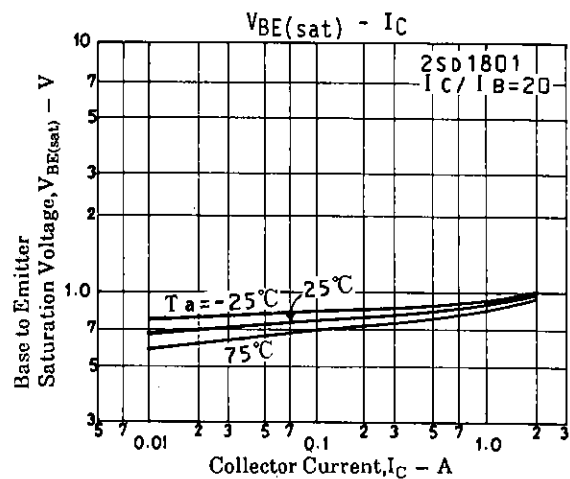
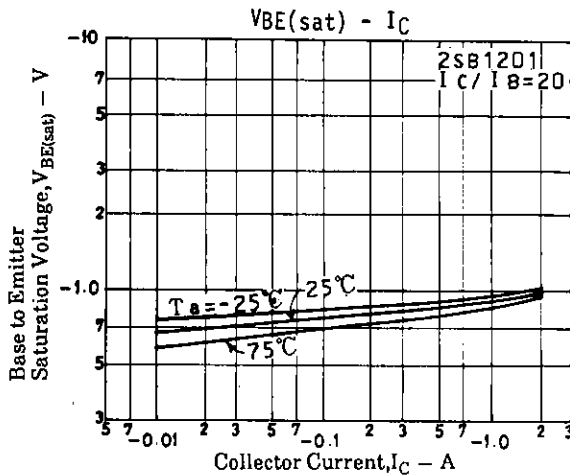
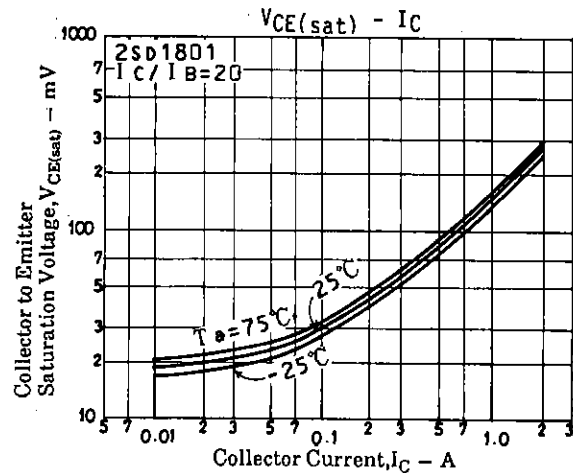
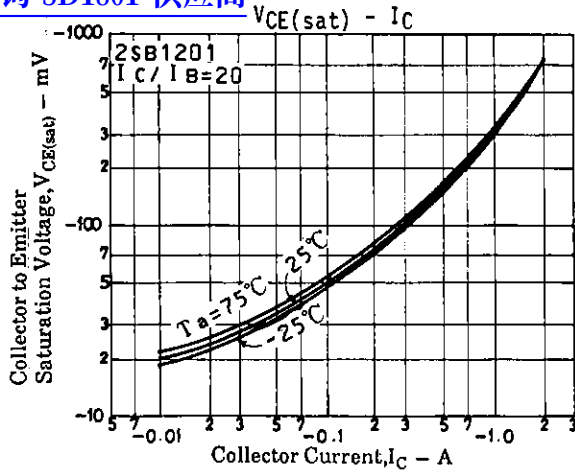
Unit (Resistance : Ω , Capacitance : F)



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