

查询"2SB1123R"供应商

No.1727B

2SB1123/2SD1623

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.
- . Low collector-to-emitter saturation voltage.
- . Large current capacity and wide ASO.
- . Fast switching speed.
- . Very small size making it easy to provide high-density, small-sized hybrid IC's.

(): 2SB1123

Absolute Maximum Ratings at Ta=25°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	500	mW
	P_C (Note)	1.3	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

(Note) Mounted on ceramic board (250mm² x 0.8mm)

Electrical Characteristics at Ta=25°C

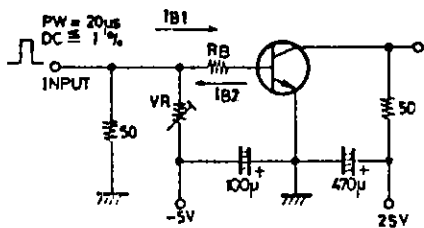
		min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB}=(-)50V, I_E=0$		(-)100	nA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=(-)4V, I_C=0$		(-)100	nA
DC Current Gain	h_{FE1}	$V_{CE}=(-)2V, I_C=(-)100mA$	100*	560*	
	h_{FE2}	$V_{CE}=(-)2V, I_C=(-)1.5A$	40		
Gain-Bandwidth Product	f_T	$V_{CE}=(-)10V, I_C=(-)50mA$		150	MHz
Output Capacitance	c_{ob}	$V_{CB}=(-)10V, f=1MHz$	(22)12		pF

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* The 2SB1123/2SD1623 are classified by 100mA h_{FE} as follows:

100	R	200	140	S	280	200	T	400	280	U	560
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Switching Time Test Circuit



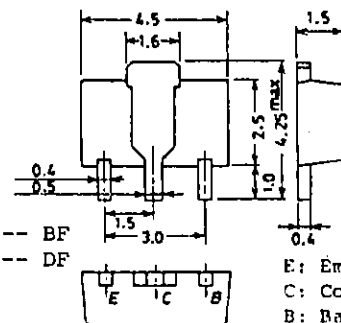
$$20I_{B1} = -20I_{B2} = I_C = 500mA$$

(For PNP, the polarity is reversed.)

Unit (Resistance : Ω , Capacitance : F)

Package Dimensions 2038

(unit:mm)



Marking: 2SB1123 -- BF
2SD1623 -- DF

E: Emitter
C: Collector
B: Base

SANYO: PCP
(Bottom View)

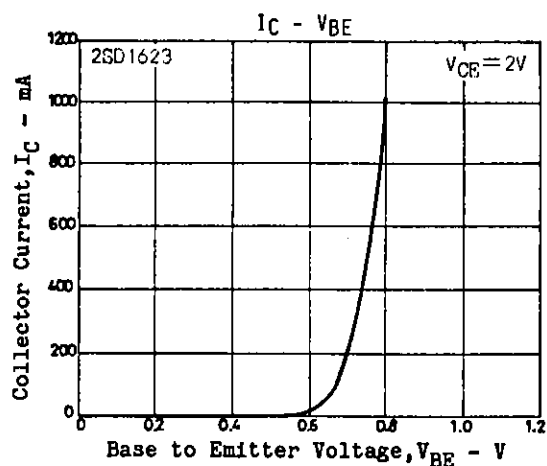
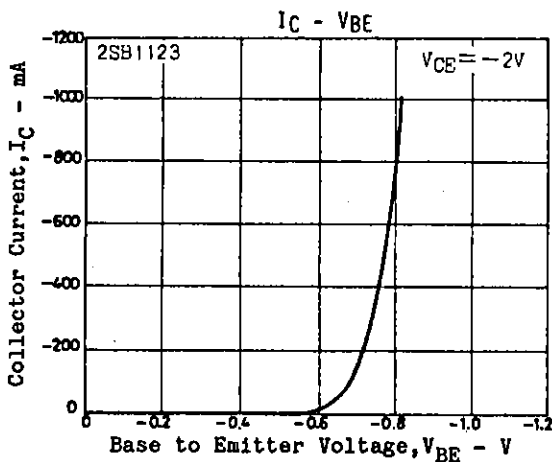
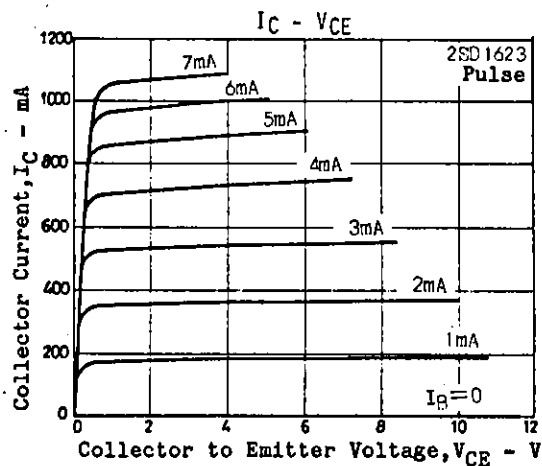
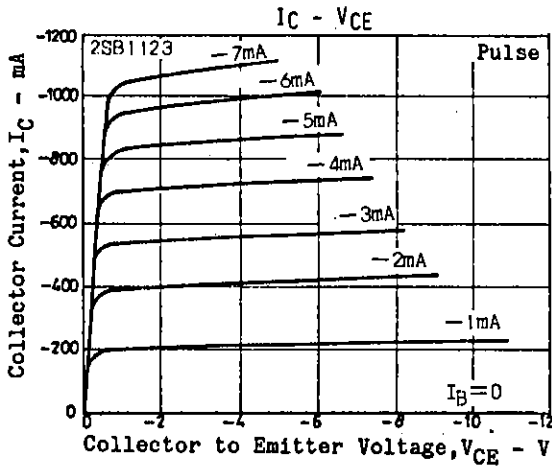
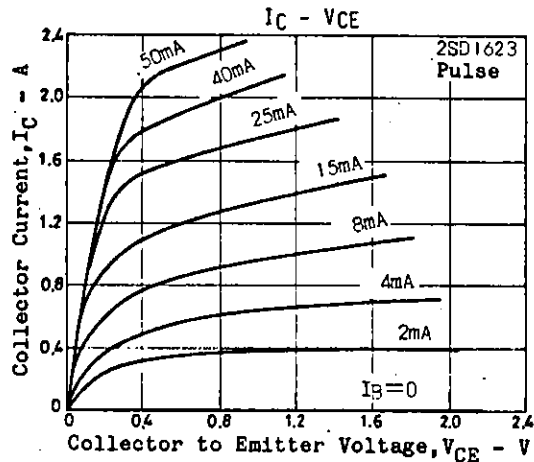
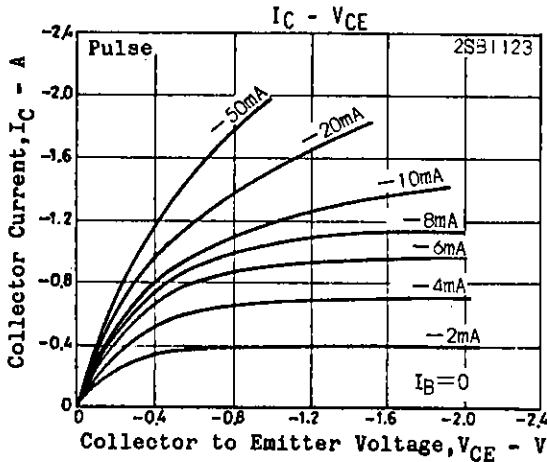
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2SB1123/2SD1623

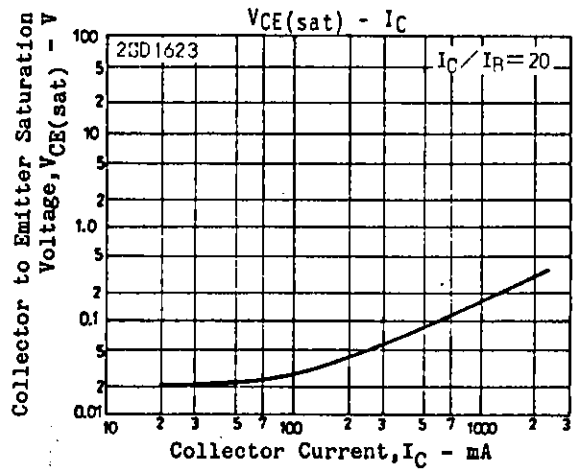
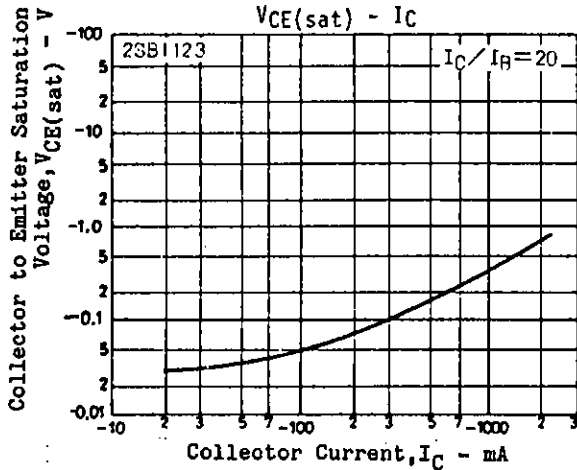
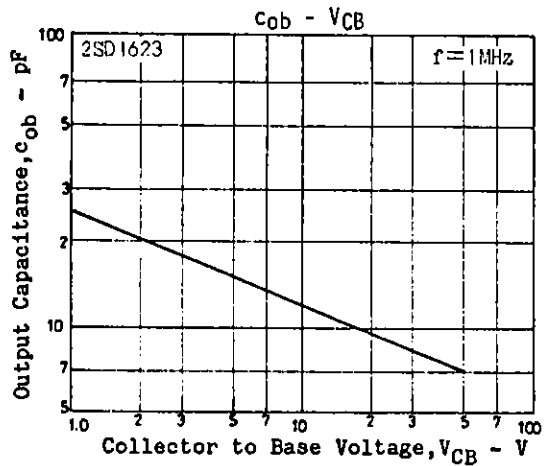
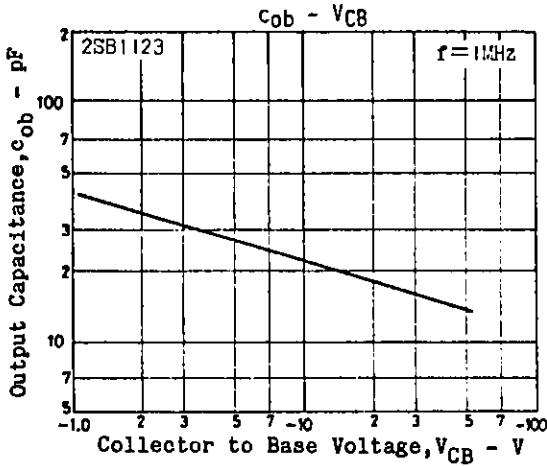
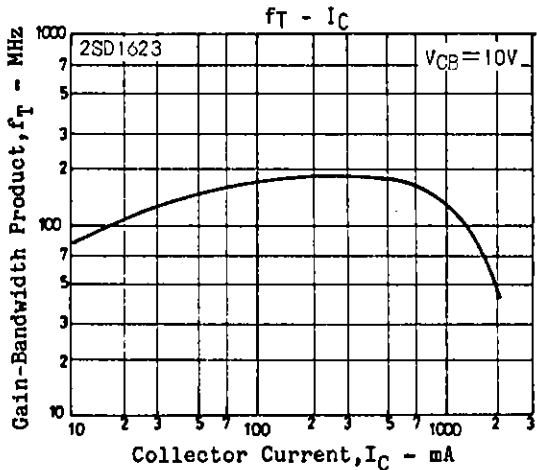
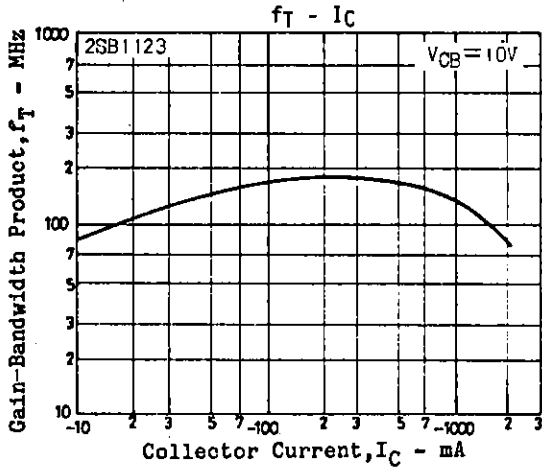
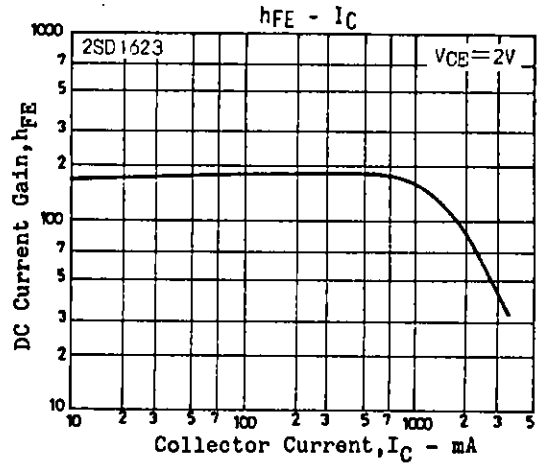
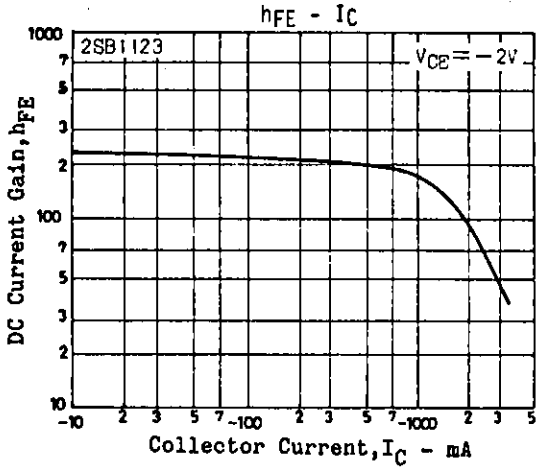
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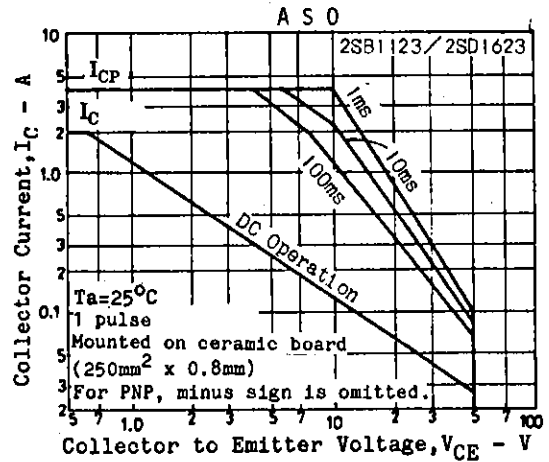
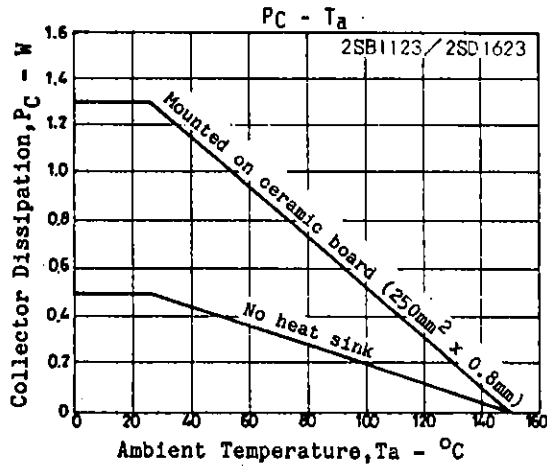
			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		(-0.3)	(-0.7)	V
				0.15	0.4	
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)1A, I_B=(-)50mA$		(-)0.9	(-)1.2	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=(-)10\mu A, I_E=0$	(-)60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)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)	60		ns
Storage Time	t_{stg}	"	(450)	550		ns
Fall Time	t_f	"	(30)	30		ns



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