

SANYO	No.2017A	2SB1125/2SD1625
		PNP/NPN Epitaxial Planar Silicon Transistors Driver Applications

Applications

- Motor drivers, printer hammer drivers, relay drivers, voltage regulator control

Features

- High DC current gain.
- Large current capacity and wide ASO
- Very small size making it easy to provide high-density, small-sized hybrid ICs

(): 2SB1125

Absolute Maximum Ratings at Ta=25°C

			unit
Collector to Base Voltage	V_{CB0}	(-)80	V
Collector to Emitter Voltage	V_{CE0}	(-)50	V
Emitter to Base Voltage	V_{EB0}	(-)10	V
Collector Current	I_C	(-)0.7	A
Collector Current(Pulse)	I_{CP}	(-)2	A
Collector Dissipation	P_C	500	mW
	Mounted on ceramic board (250mm ² x 0.8mm)	1.3	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

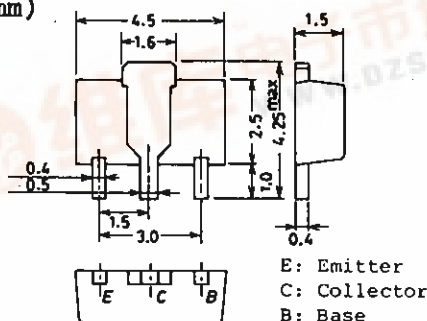
Electrical Characteristics at Ta=25°C

			min	typ	max	unit
Collector Cutoff Current	I_{CB0}	$V_{CB}=(-)40V, I_E=0$			(-)100	nA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=(-)8V, I_C=0$			(-)100	nA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=(-)2V, I_C=(-)50mA$	5000			
	$h_{FE(2)}$	$V_{CE}=(-)2V, I_C=(-)500mA$	4000			
Gain-Bandwidth Product	f_T	$V_{CE}=(-)5V, I_C=(-)50mA$	(3000)	200		MHz
				(170)		MHz
Output Capacitance	c_{ob}	$V_{CB}=(-)10V, f=1MHz$		9		pF
				(18)		pF

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Marking 2SB1125: BH
2SD1625: DH

Package Dimensions 2038
(unit:mm)

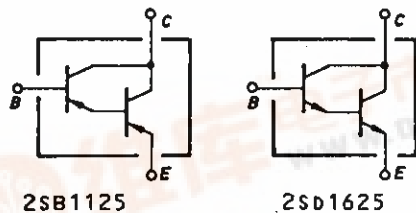


E: Emitter
C: Collector
B: Base

SANYO: PCP

(Bottom View)

Electrical Connection



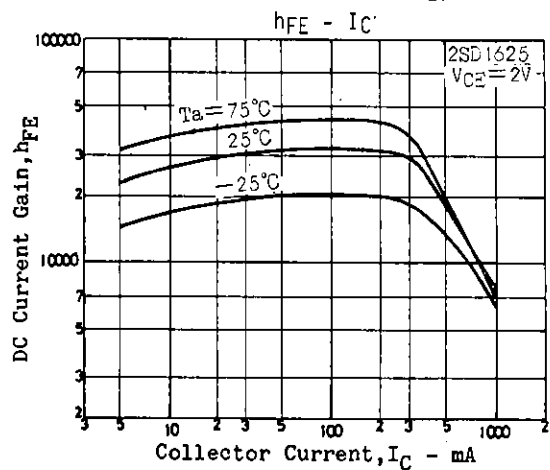
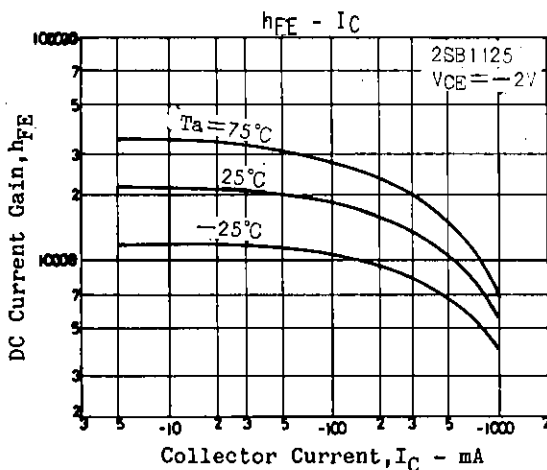
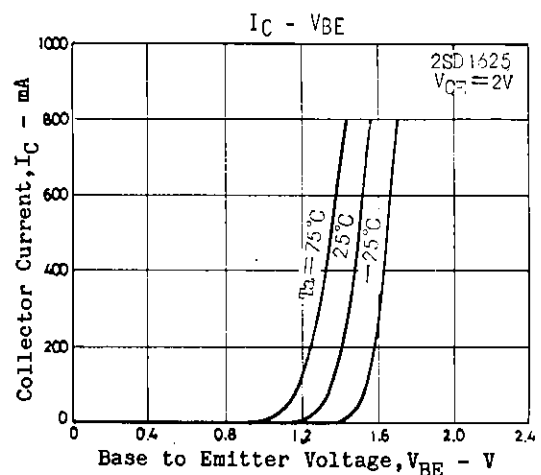
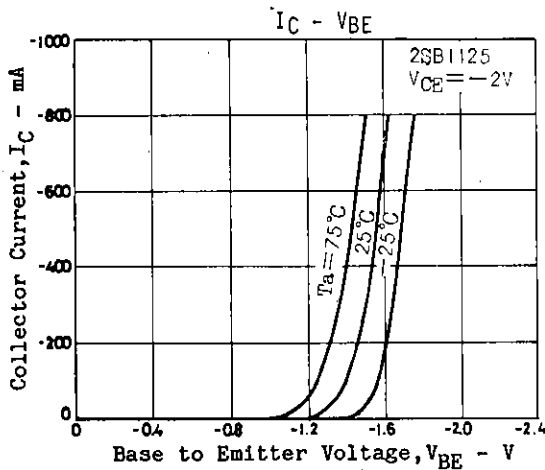
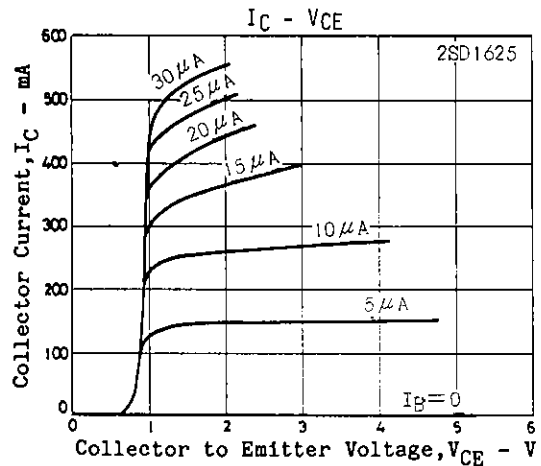
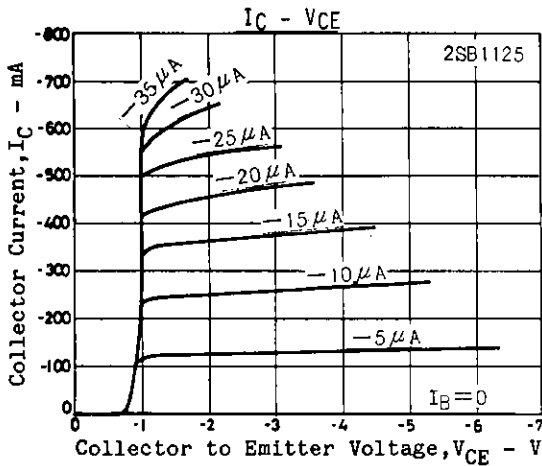
2SB1125

2SD1625

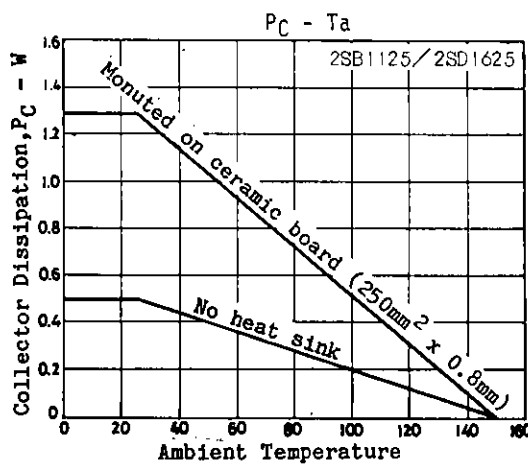
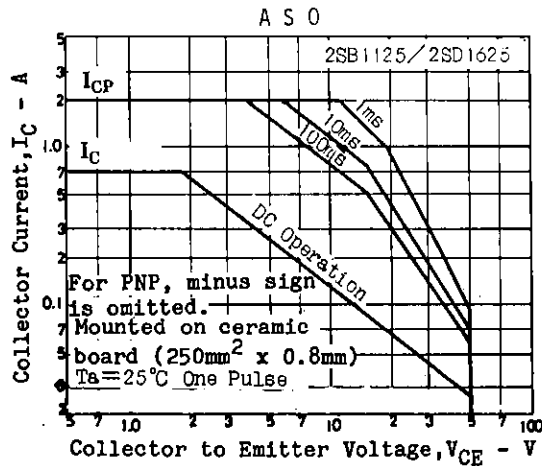
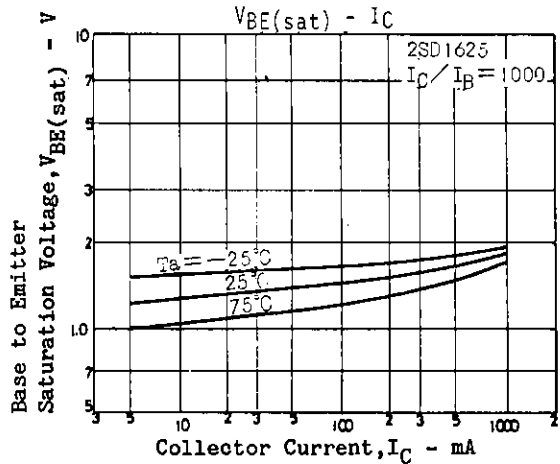
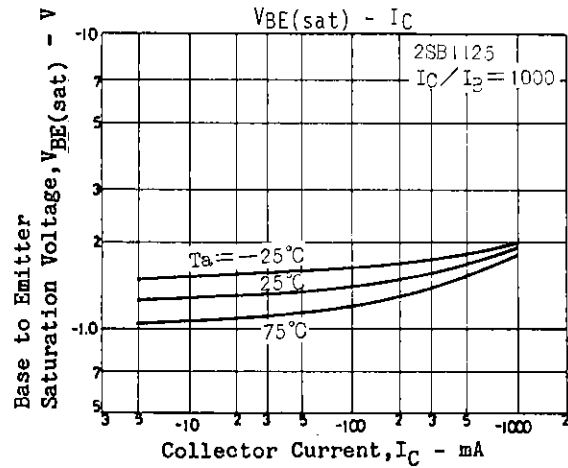
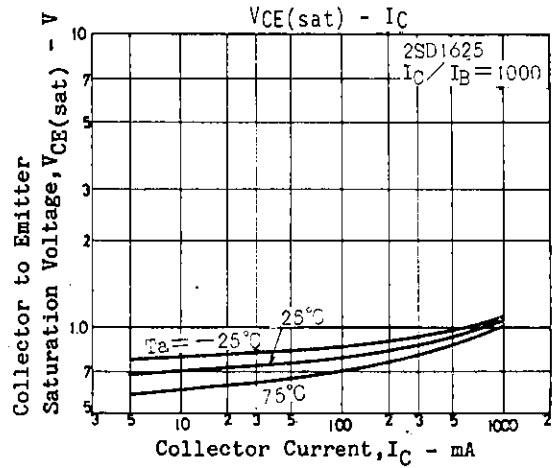
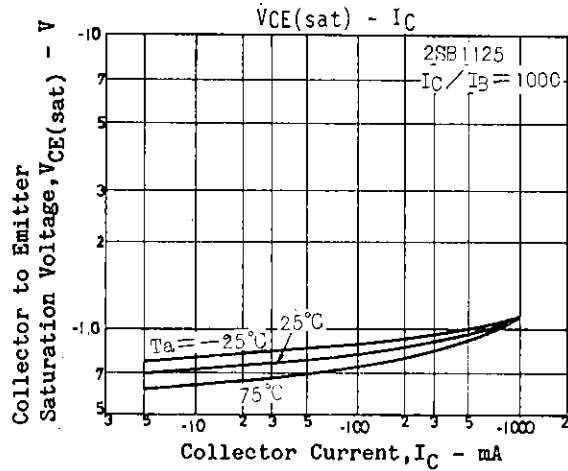
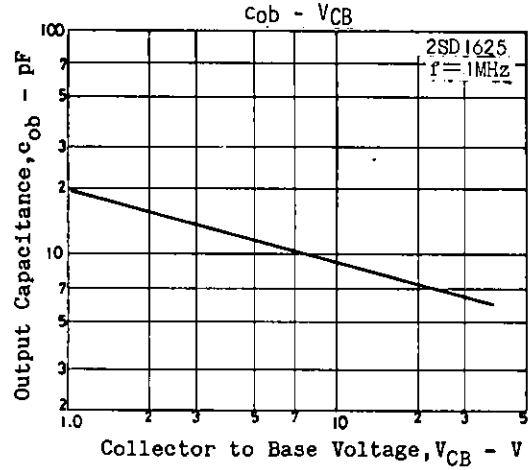
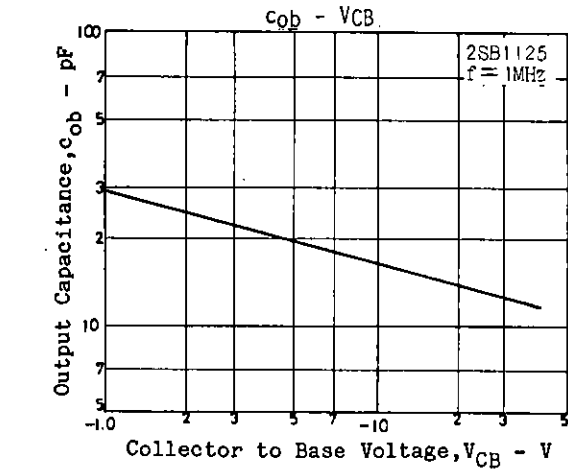
2SB1125/2SD1625

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			min	typ	max	unit
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)100mA, I_B=(-)0.1mA$	(-)0.8	(-)1.2		V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)100mA, I_B=(-)0.1mA$	(-)1.3	(-)2.0		V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	(-)80			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=(-)1mA, R_{BE}=\infty$	(-)50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=(-)10\mu A, I_C=0$	(-)10			V



2SB1125/2SD1625



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