

SANYO

No.687G

2SB825/2SD1061

PNP/NPN Epitaxial Planar Silicon Transistors

50V/7A Switching Applications**Use :** Universal high current switching as solenoid driving, high speed inverter and converter.**Features**

- Low saturation voltage : $V_{CE(sat)} = (-)0.4V$ max.
- Wide ASO,

() 2SB825

Absolute Maximum Ratings at $T_a = 25^\circ C$

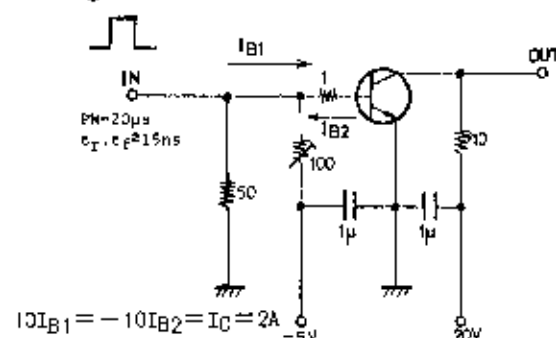
			unit
Collector-to-Base Voltage	V_{CBO}	(-)60	V
Collector-to-Emitter Voltage	V_{CEO}	(-)50	V
Emitter-to-Base Voltage	V_{EBO}	(-)6	V
Collector Current	I_C	(-)7	A
Collector Current(Pulse)	I_{CP}	(-)12	A
Collector Dissipation	P_C	40	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55 to +150	$^\circ C$

 $T_C = 25^\circ C$ **Electrical Characteristics at $T_a = 25^\circ C$**

			min	typ	max	unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = (-)40V, I_E = 0$			(-)0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EBO} = (-)4V, I_C = 0$			(-)0.1	mA
DC Current Gain	$h_{FE}(1)$	$V_{CE} = (-)2V, I_C = (-)1A$	70*		280*	
	$h_{FE}(2)$	$V_{CE} = (-)2V, I_C = (-)5A$	30			
Gain Bandwidth Product	f_T	$V_{CE} = (-)5V, I_C = (-)1A$		10		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C = (-)4A, I_E = (-)0.4A$			(-)0.4	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C = (-)1mA, I_E = 0$	(-)60			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C = (-)1mA, R_{BE} = \infty$	(-)50			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E = (-)1mA, I_C = 0$	(-)6			V
Turn-ON Time	t_{on}	At the test circuit.		0.2		μs
Fall Time	t_f	"		(0.1)0.3		μs
Storage Time	t_{stg}	"		(0.7)0.9		μs

* : 2SB825 / 2SD1061 are classified by 1A h_{FE} as follows.

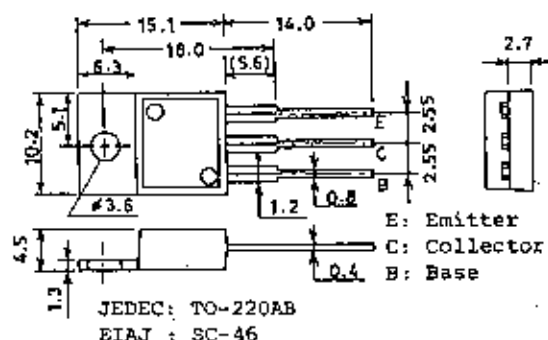
70	Q	140	100	R	200	140	S	280
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Switching Time Test Circuit

(For PNP, the polarity is reversed.)

Unit (resistance: Ω , capacitance: F)**Package Dimensions 2010B**

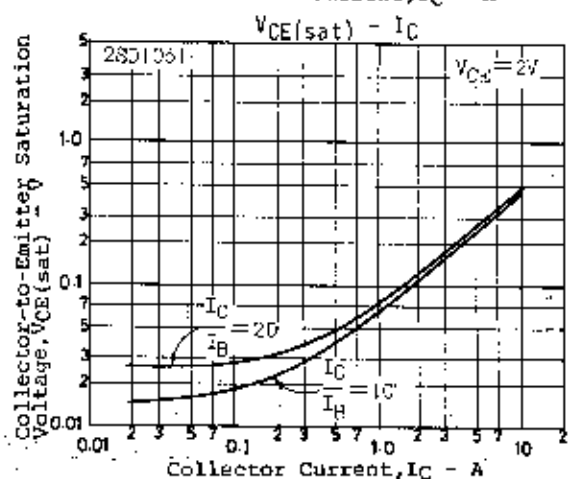
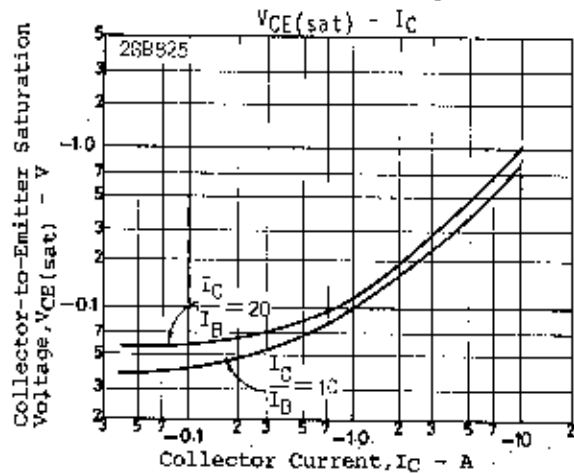
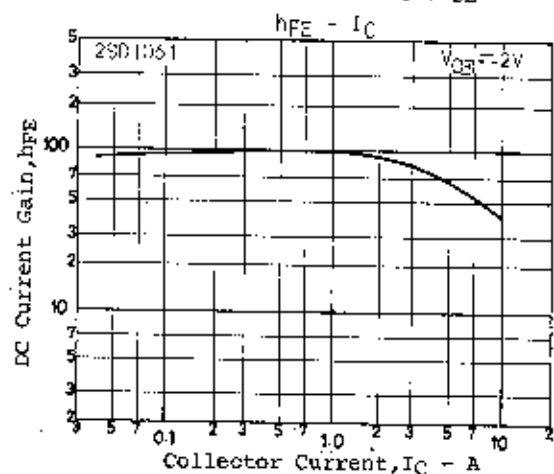
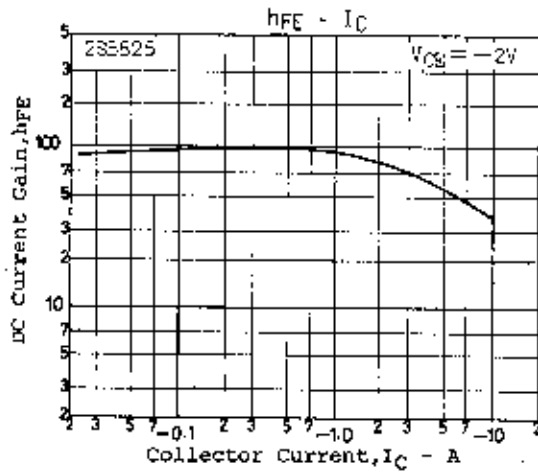
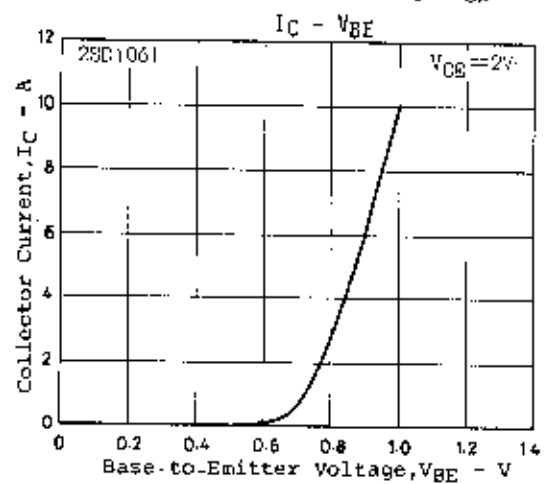
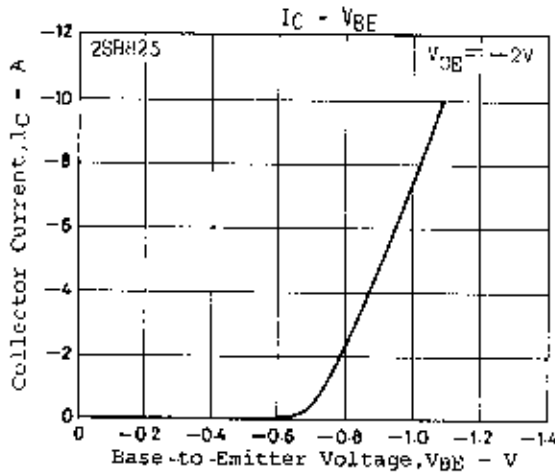
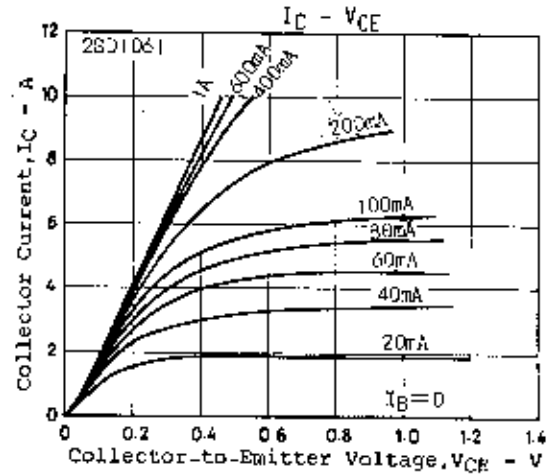
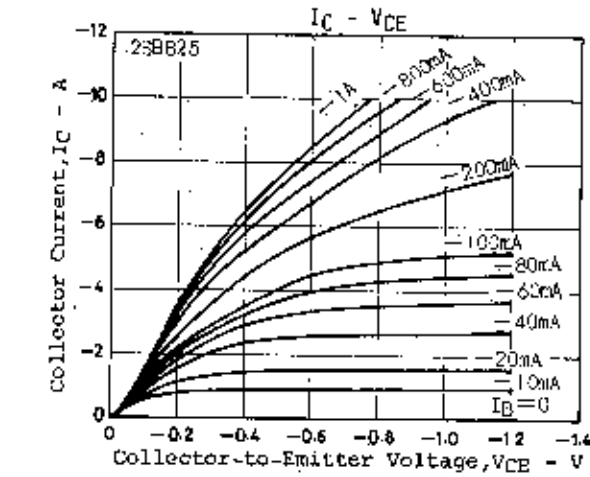
(unit:mm)

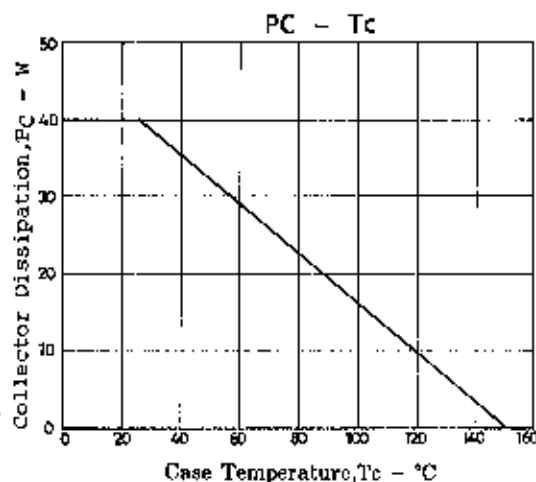
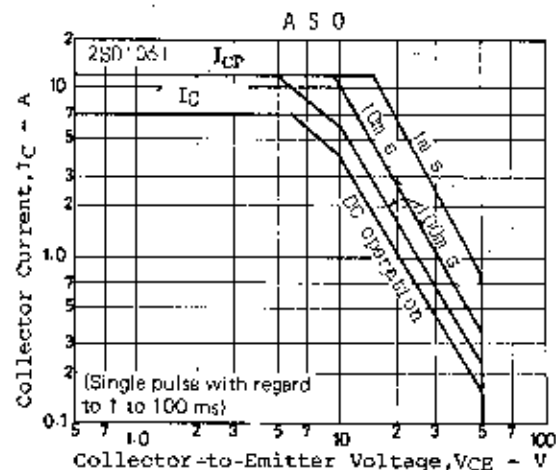
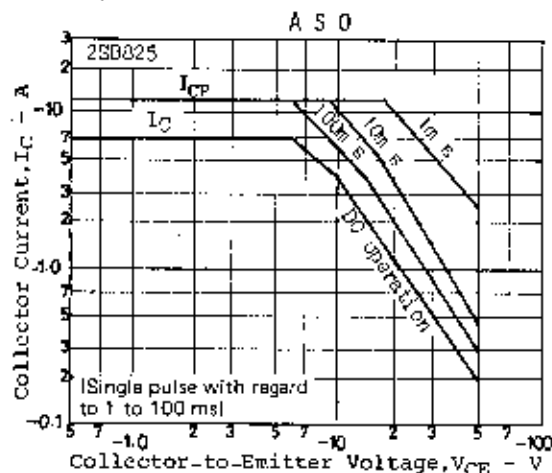
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2SB825/2SD1061





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