

2SB0940 (2SB940), 2SB0940A (2SB940A)

Silicon PNP epitaxial planar type

For power amplification

For TV vertical deflection output

Complementary to 2SD1264, 2SD1264A

■ Features

- High collector-emitter voltage (Base open) V_{CEO}
- Large collector power dissipation P_C
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_C = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	-200	V
Collector-emitter voltage (Base open)	2SB0940	V_{CEO} -150	V
	2SB0940A	-180	
Emitter-base voltage (Collector open)	V_{EBO}	-6	V
Collector current	I_C	-2	A
Peak collector current	I_{CP}	-3	A
Collector power dissipation	P_C	30	W
		$T_a = 25^\circ\text{C}$	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

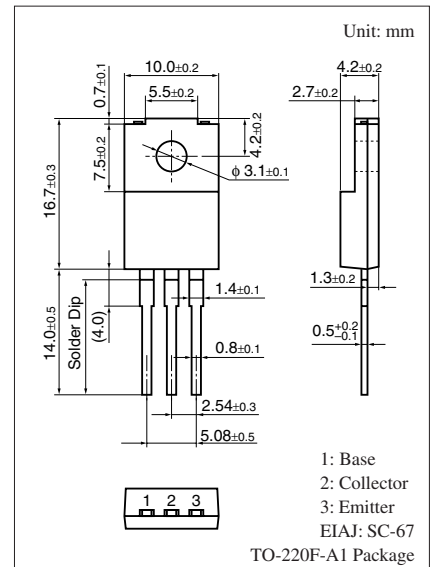
■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = -50 \mu\text{A}$, $I_E = 0$	-200			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = -5 \text{ mA}$, $I_B = 0$	-150			V
			-180			
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -500 \mu\text{A}$, $I_C = 0$	-6			V
Base-emitter voltage	V_{BE}	$V_{CE} = -10 \text{ V}$, $I_C = -400 \text{ mA}$			-1	V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -200 \text{ V}$, $I_E = 0$			-50	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -4 \text{ V}$, $I_C = 0$			-50	μA
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10 \text{ V}$, $I_C = -150 \text{ mA}$	60		240	—
	h_{FE2}	$V_{CE} = -10 \text{ V}$, $I_C = -400 \text{ mA}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}$, $I_B = -50 \text{ mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -10 \text{ V}$, $I_C = -0.5 \text{ A}$, $f = 10 \text{ MHz}$		30		MHz

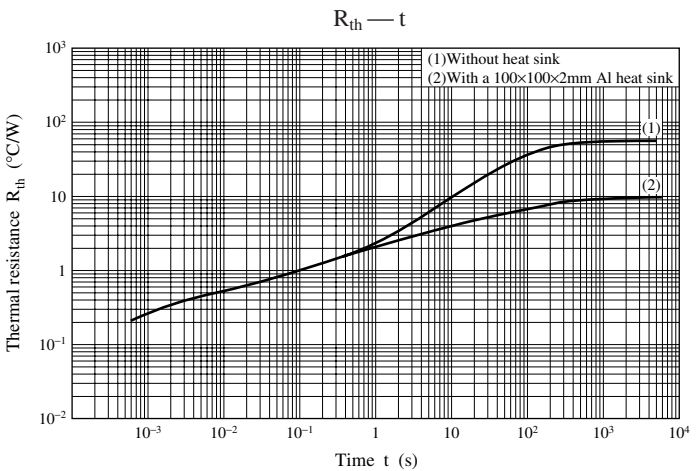
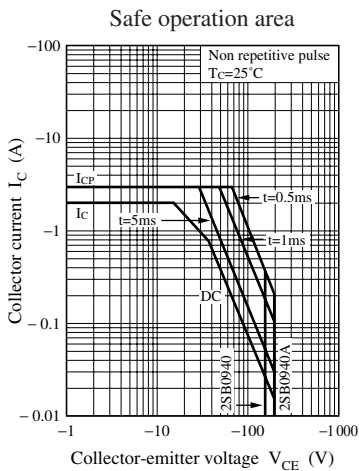
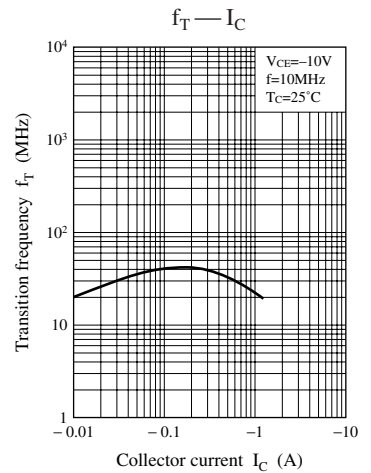
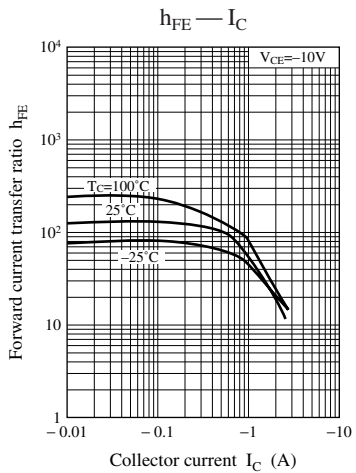
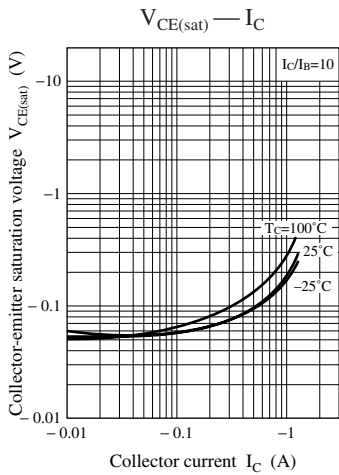
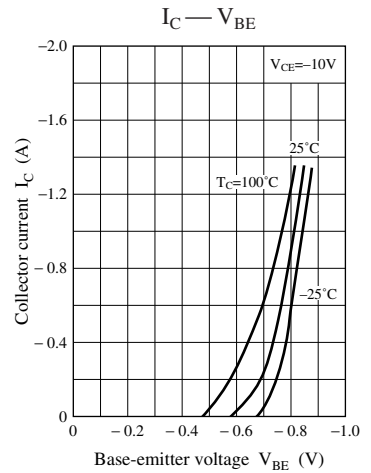
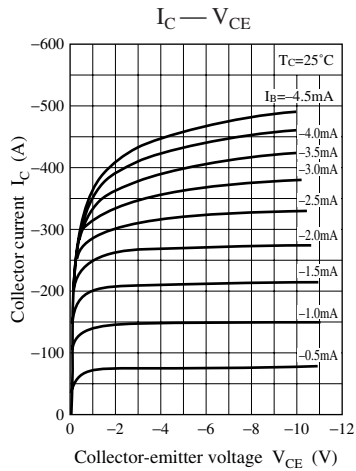
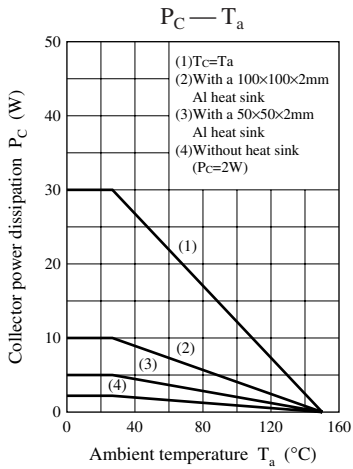
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

2. *: Rank classification

Rank	Q	P
h_{FE1}	60 to 140	100 to 240



Note) The part numbers in the parenthesis show conventional part number.



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