

# 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	$^\circ\text{C}$

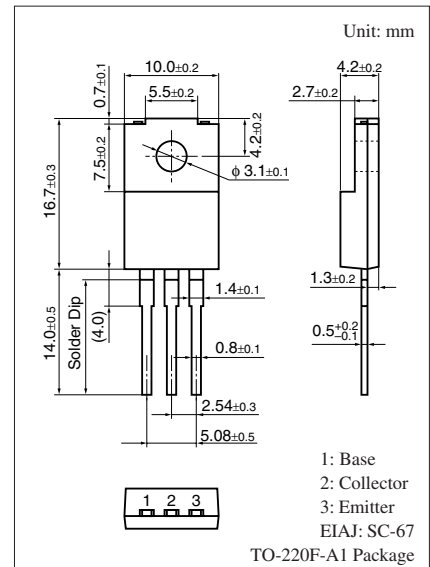
### ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

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	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = -4 \text{ V}, I_C = 0$			-50	$\mu\text{A}$
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

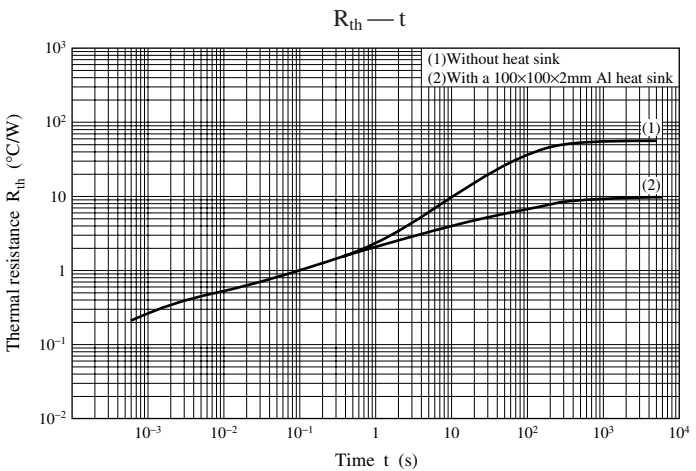
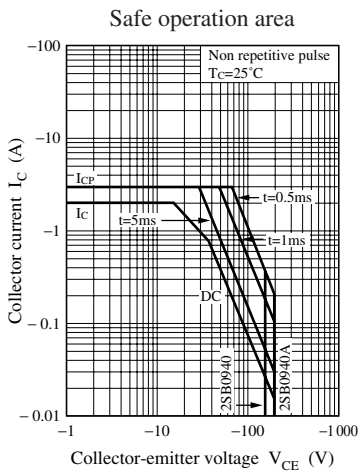
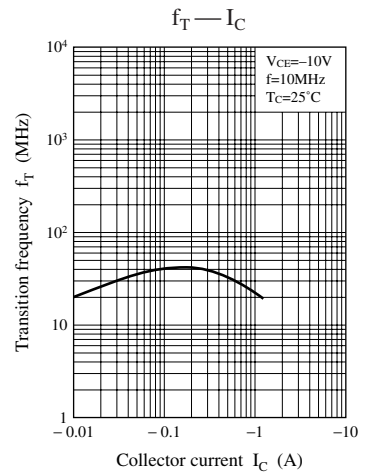
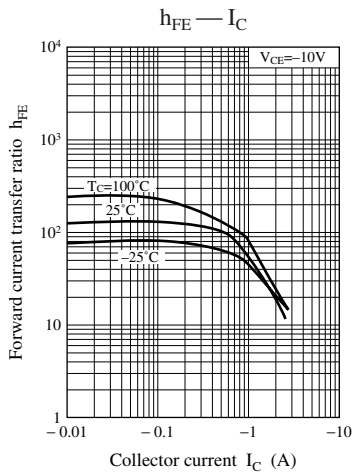
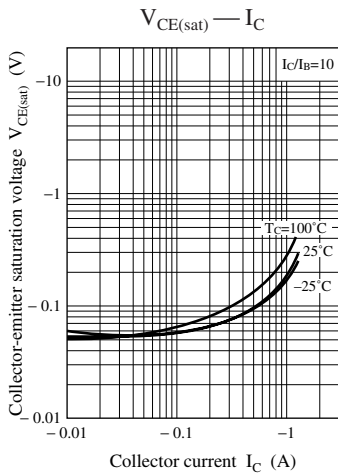
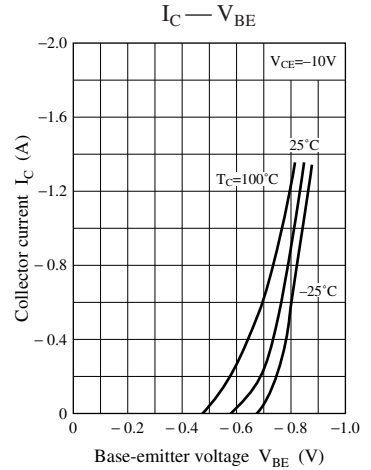
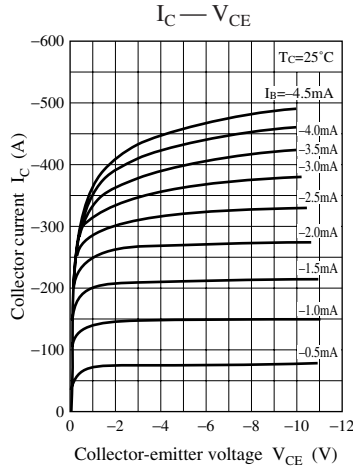
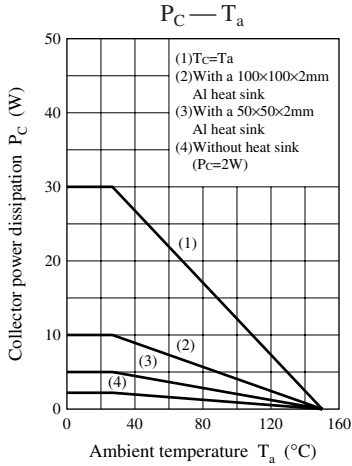
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

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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