

# 2SD1485

## Silicon PNP triple diffusion planar type

For high power amplification

Complementary to 2SB1054

### ■ Features

- Excellent collector current  $I_C$  characteristics of forward current transfer ratio  $h_{FE}$
- Wide safe operation area
- High transition frequency  $f_T$
- 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 <sub>CBO</sub>	100	V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	100	V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	5	V
Collector current	I <sub>C</sub>	5	A
Peak collector current	I <sub>CP</sub>	8	A
Collector power dissipation	P <sub>C</sub>	60	W
		3.0	
	T <sub>a</sub> = 25°C		
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

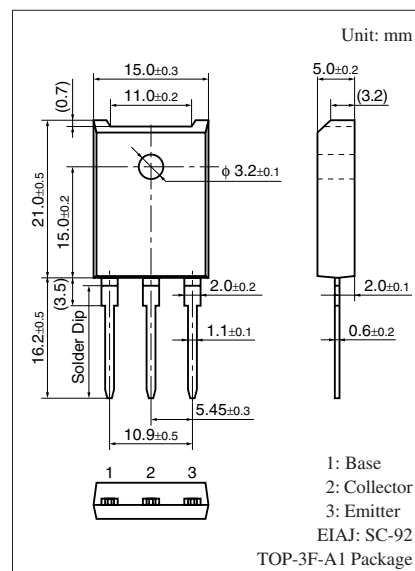
### ■ Electrical Characteristics $T_C = 25^\circ\text{C} \pm 3^\circ\text{C}$

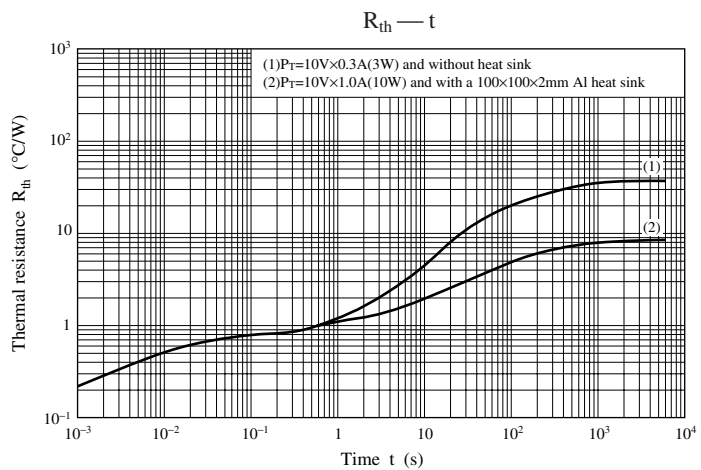
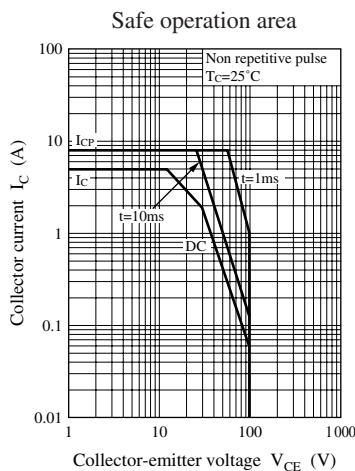
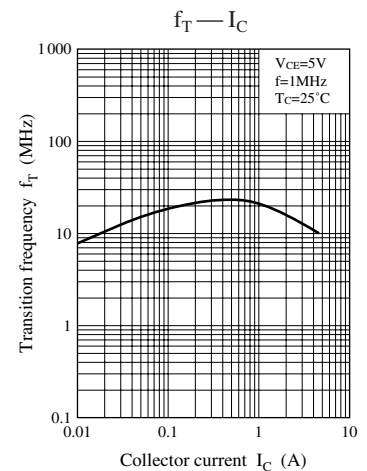
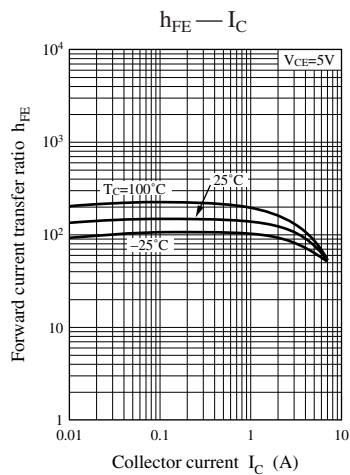
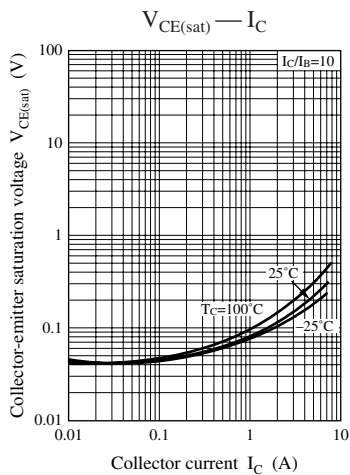
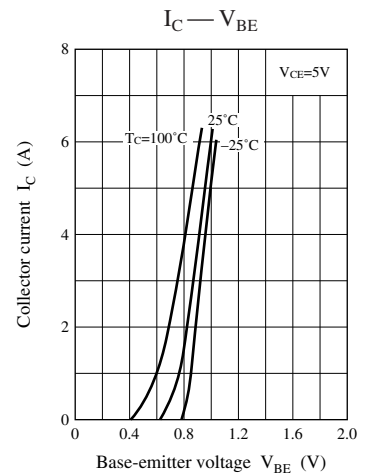
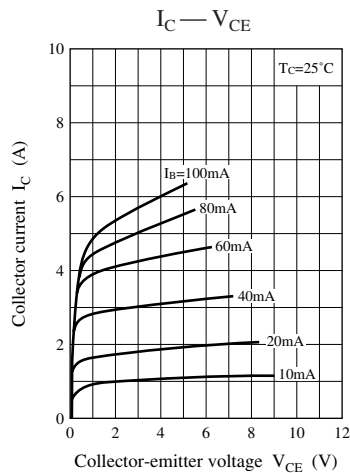
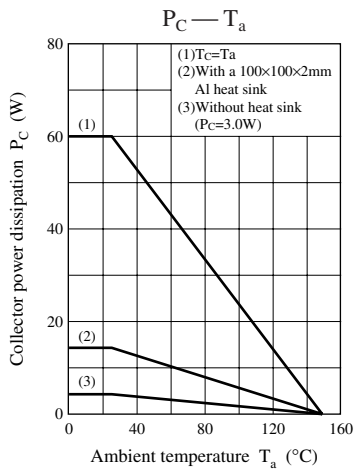
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Base-emitter voltage	$V_{BE}$	$V_{CE} = 5\text{ V}, I_C = 3\text{ A}$			1.8	V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = 100\text{ V}, I_E = 0$			50	$\mu\text{A}$
Emitter-base cutoff current (Collector open)	$I_{EBO}$	$V_{EB} = 3\text{ V}, I_C = 0$			50	$\mu\text{A}$
Forward current transfer ratio	$h_{FE1}$	$V_{CE} = 5\text{ V}, I_C = 20\text{ mA}$	20			—
	$h_{FE2}^*$	$V_{CE} = 5\text{ V}, I_C = 1\text{ A}$	60		200	
	$h_{FE3}$	$V_{CE} = 5\text{ V}, I_C = 3\text{ A}$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3\text{ A}, I_B = 0.3\text{ A}$			2.0	V
Transition frequency	$f_T$	$V_{CE} = 5\text{ V}, I_C = 0.5\text{ A}, f = 1\text{ MHz}$		20		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		90		pF

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

2. \*: Rank classification

Rank	Q	P
$h_{FE2}$	60 to 120	100 to 200





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