DSA2507

Silicon PNP epitaxial planar type

For low frequency amplification

■ Features

- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

■ Packaging

Embossed type (Thermo-compression sealing): 3000 pcs / reel (standard)

■ Package

- Code
  Mini3-G3-B
- Pin Name
  1. Base
  2. Emitter
  3. Collector

■ Marking Symbol: B4

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	V_{CBO}	–30	V
Collector-emitter voltage (Base open)	V_{CEO}	–20	V
Emitter-base voltage (Collector open)	V_{EBO}	–5	V
Collector current	I_C	–1.5	A
Peak collector current	I_{CP}	–5	A
Collector power dissipation *	P_C	400	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–55 to +150	°C

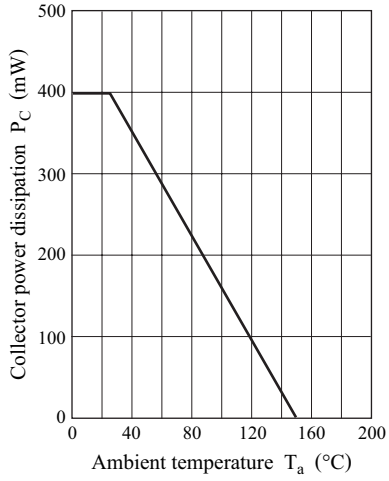
Note) *: Printed circuit board: Copper foil area of 2.25 cm^2 or more, and the board thickness of 1.7 mm for the collector portion

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

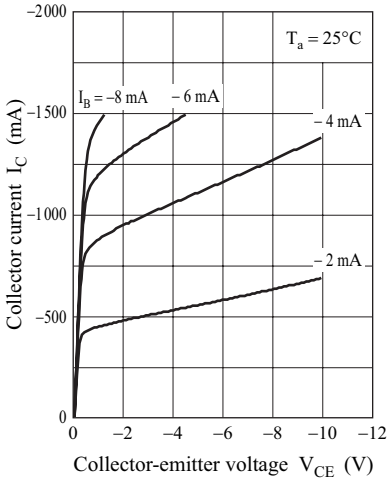
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = –10\ \mu A$, $I_E = 0$	–30			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = –1$ mA, $I_B = 0$	–20			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = –10\ \mu A$, $I_C = 0$	–5			V
Forward current transfer ratio *	h_{FE}	$V_{CE} = –2$ V, $I_C = –100$ mA	160		560	—
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = –500$ mA, $I_B = –25$ mA		–50	–150	mV
Transition frequency	f_T	$V_{CE} = –10$ V, $I_C = –20$ mA		220		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = –10$ V, $I_E = 0$, f = 1 MHz			35	pF

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.
2. *: Pulse measurement

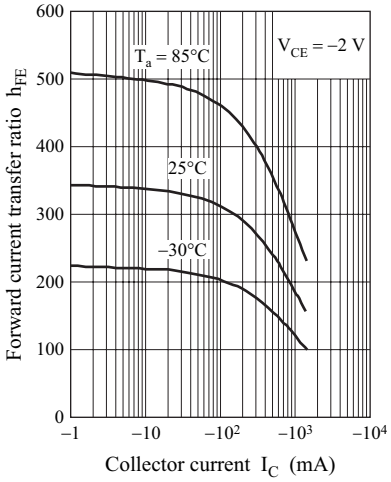
P_C — T_a



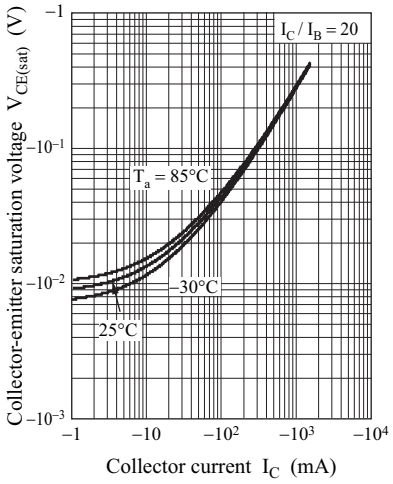
I_C — V_{CE}



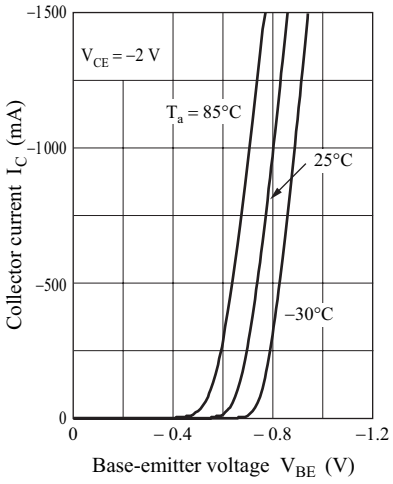
h_{FE} — I_C



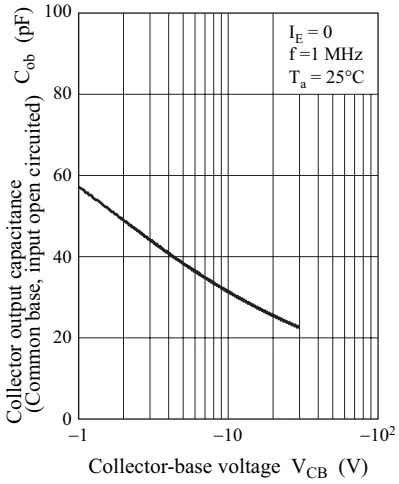
$V_{CE(sat)}$ — I_C



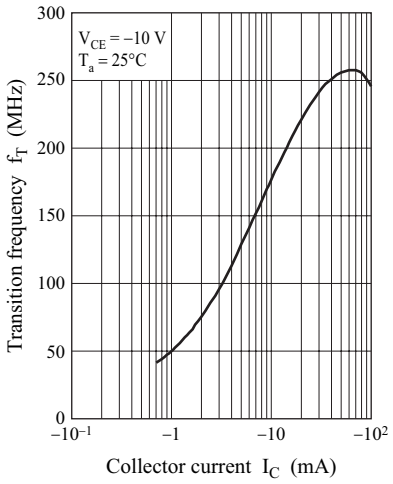
I_C — V_{BE}



C_{ob} — V_{CB}

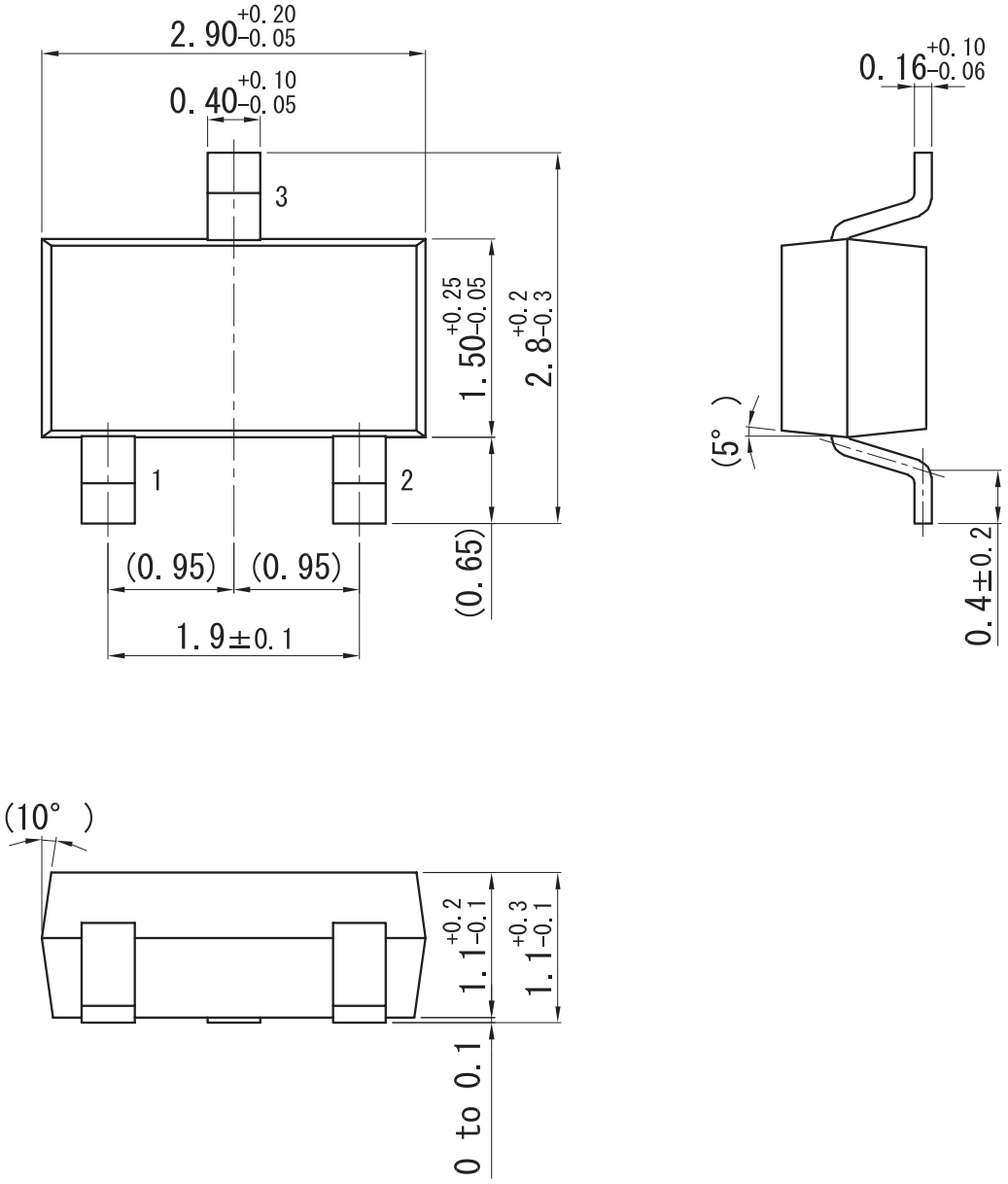


f_T — I_C

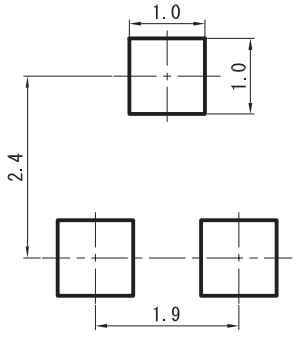


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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