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# DSA7506

## Silicon PNP epitaxial planar type

For low frequency amplification

### ■ Features

- Low collector-emitter saturation voltage  $V_{CE(sat)}$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

### ■ Marking Symbol: 4LR

### ■ Packaging

DSA7506R0L Embossed type (Thermo-compression sealing): 1 000 pcs / reel (standard)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	-30	V
Collector-emitter voltage (Base open)	$V_{CEO}$	-25	V
Emitter-base voltage (Collector open)	$V_{EBO}$	-11	V
Collector current	$I_C$	-3	A
Peak collector current *1	$I_{CP}$	-10	A
Collector power dissipation *2	$P_C$	1	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Operating ambient temperature	$T_{opr}$	-40 to +85	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

Note) \*1: Pulse width  $\leq 1\text{ms}$ , Single pulse

\*2: Printed circuit board: Copper foil area of  $1\text{ cm}^2$  or more, and the board thickness of 1.7 mm for the collector portion

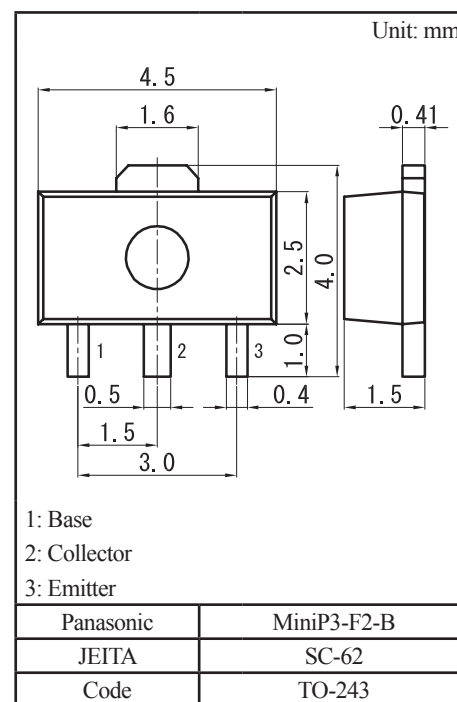
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

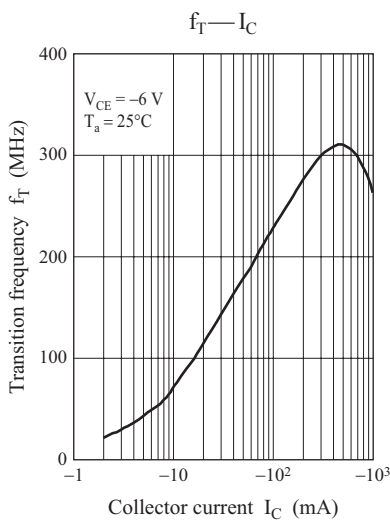
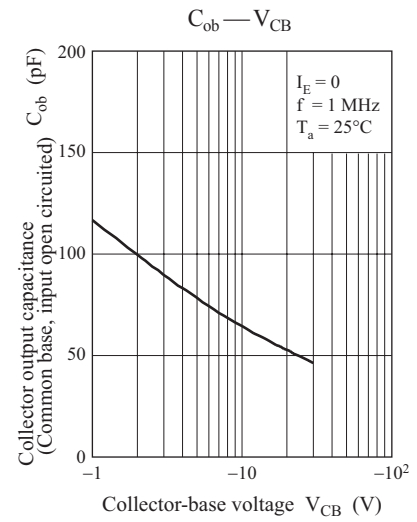
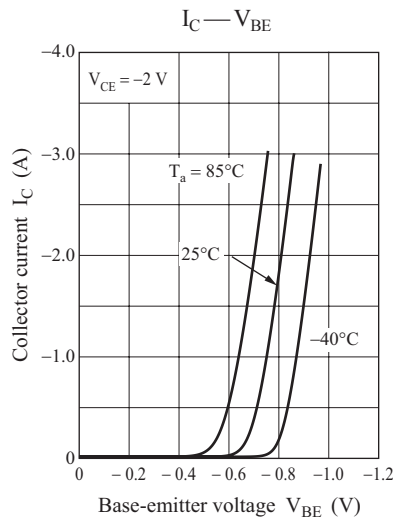
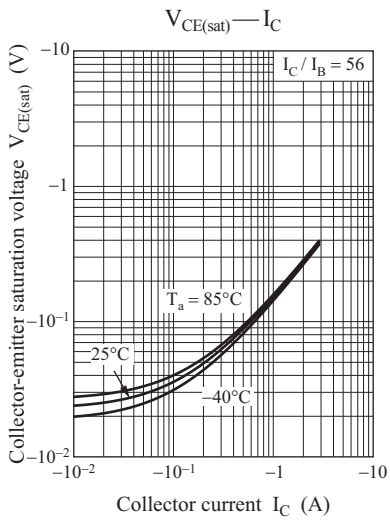
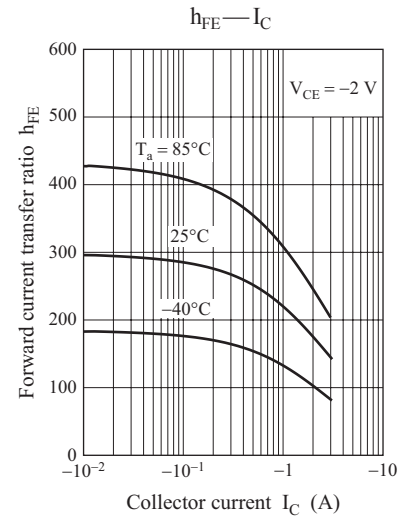
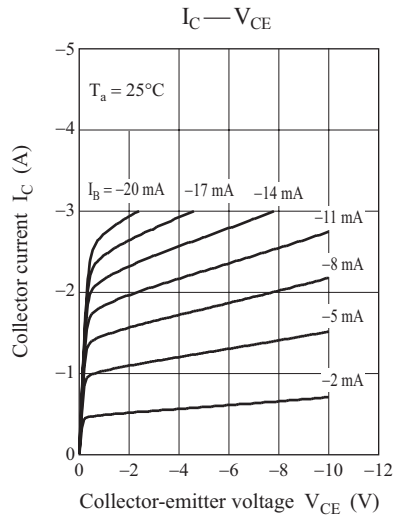
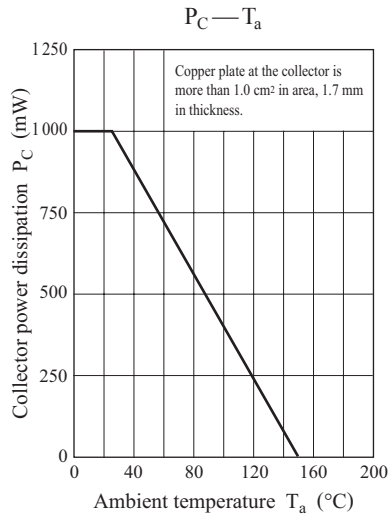
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	$V_{CBO}$	$I_C = -10\ \mu\text{A}$ , $I_E = 0$	-30			V
Collector-emitter voltage (Base open)	$V_{CEO}$	$I_C = -1\ \text{mA}$ , $I_B = 0$	-25			V
Emitter-base voltage (Collector open)	$V_{EBO}$	$I_E = -10\ \mu\text{A}$ , $I_C = 0$	-11			V
Forward current transfer ratio *1, 2	$h_{FE}$	$V_{CE} = -2\ \text{V}$ , $I_C = -1.4\ \text{A}$	130		450	—
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -1.4\ \text{A}$ , $I_B = -25\ \text{mA}$		-0.2	-0.27	V
Transition frequency	$f_T$	$V_{CE} = -6\ \text{V}$ , $I_C = -50\ \text{mA}$		150		MHz
Collector output capacitance (Common base, input open circuited)	$C_{ob}$	$V_{CB} = -10\ \text{V}$ , $I_E = 0$ , $f = 1\ \text{MHz}$			85	pF

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

2. \*1: Pulse measurement

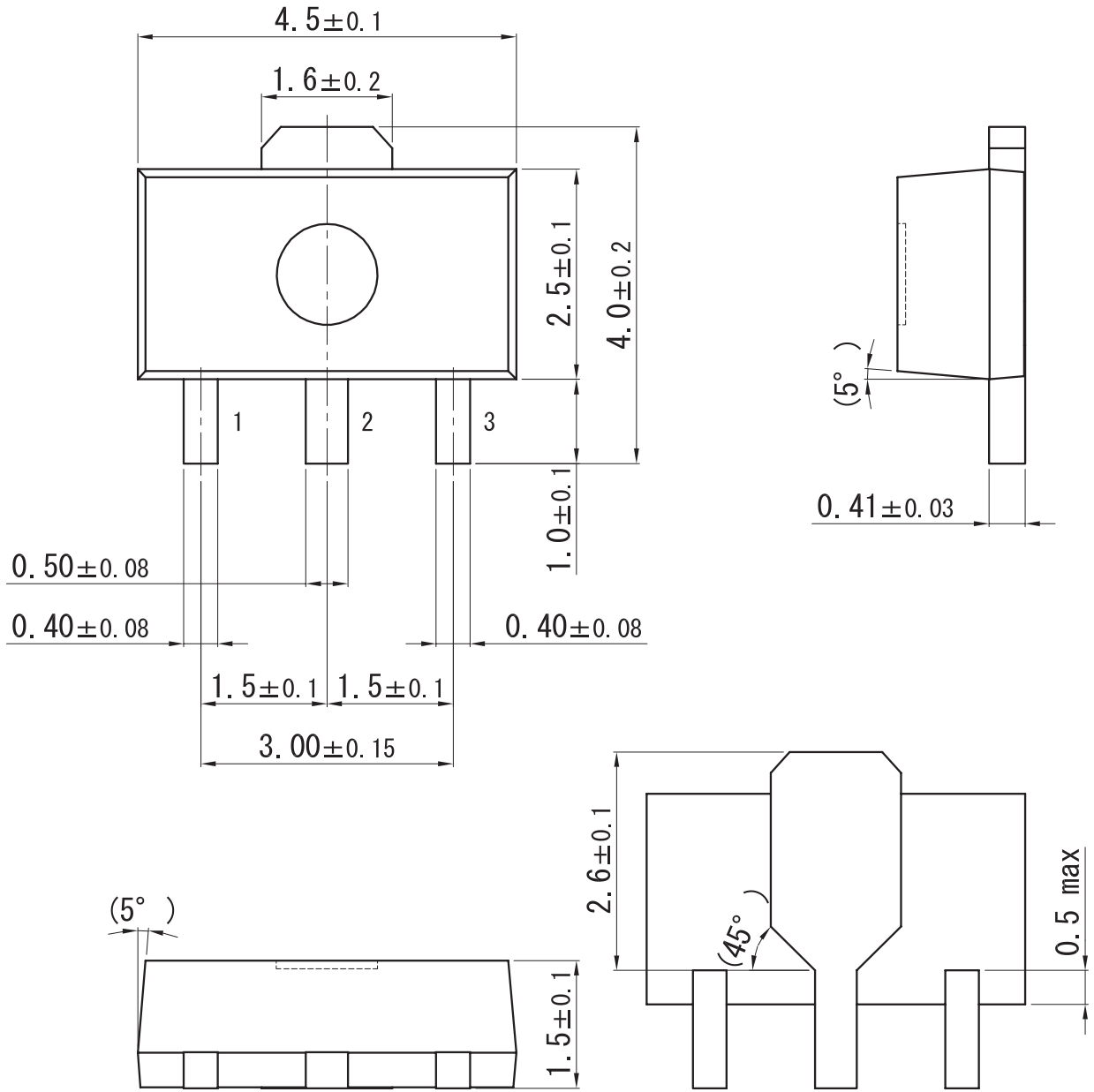
\*2: Rank classification: Only R rank producing.



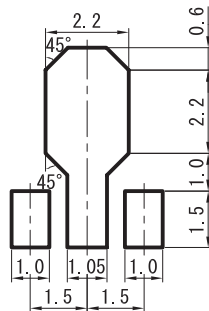


MiniP3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)





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