DSA7506

Silicon PNP epitaxial planar type

For low frequency amplification

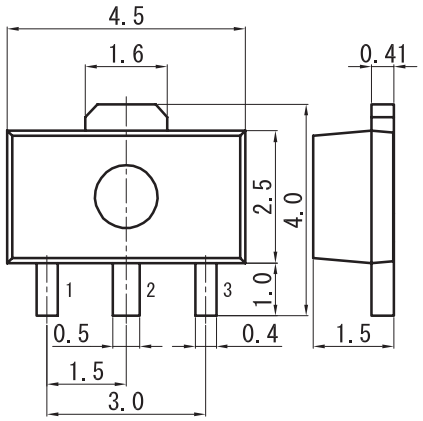
■ Features

- 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)



1: Base
2: Collector
3: Emitter

Panasonic	MiniP3-F2-B
JEITA	SC-62
Code	TO-243

■ 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}	–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	°C
Operating ambient temperature	T_{opr}	–40 to +85	°C
Storage temperature	T_{stg}	–55 to +150	°C

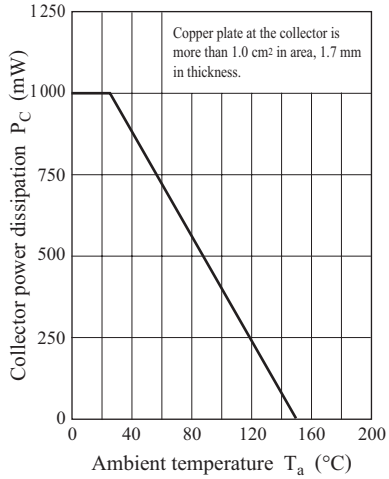
Note) ∗1: Pulse width ≤ 1ms, Single pulse
∗2: Printed circuit board: Copper foil area of 1 cm^2 or more, and the board thickness of 1.7 mm for the collector portion

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

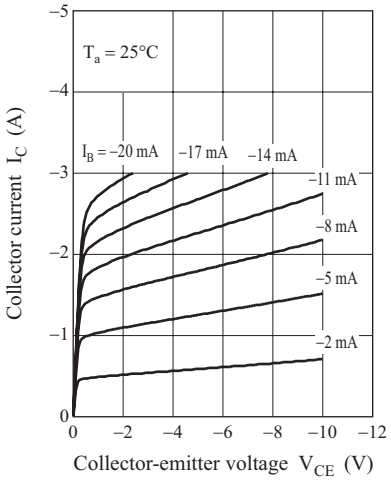
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base voltage (Emitter open)	V_{CBO}	$I_C = –10\ \mu A$, $I_E = 0$	–30			V
Collector-emitter voltage (Base open)	V_{CEO}	$I_C = –1$ mA, $I_B = 0$	–25			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = –10\ \mu A$, $I_C = 0$	–11			V
Forward current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

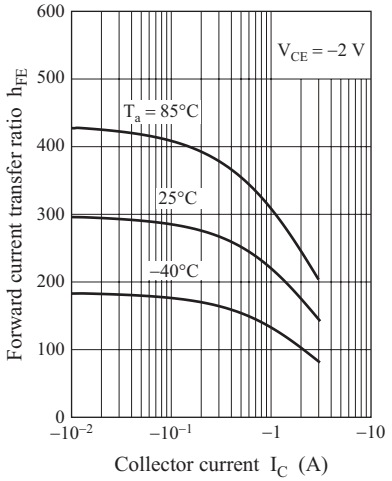
P_C — T_a



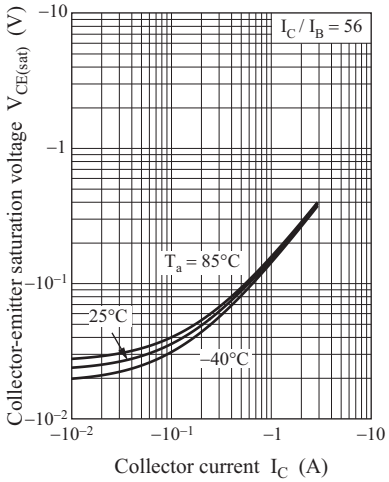
I_C — V_{CE}



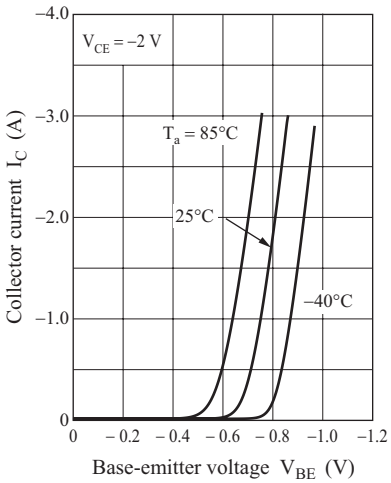
h_{FE} — I_C



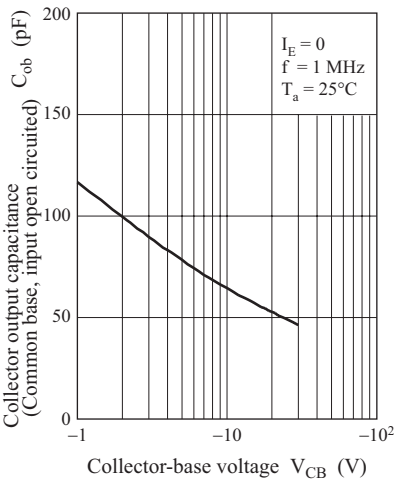
$V_{CE(sat)}$ — I_C



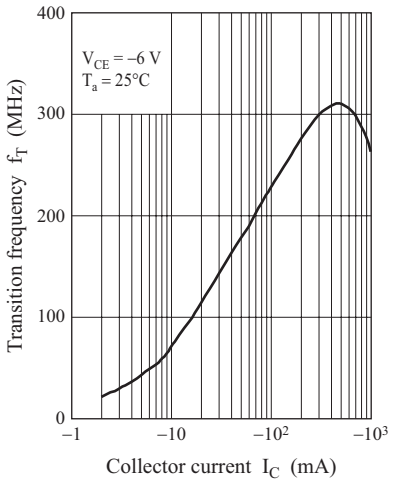
I_C — V_{BE}



C_{ob} — V_{CB}

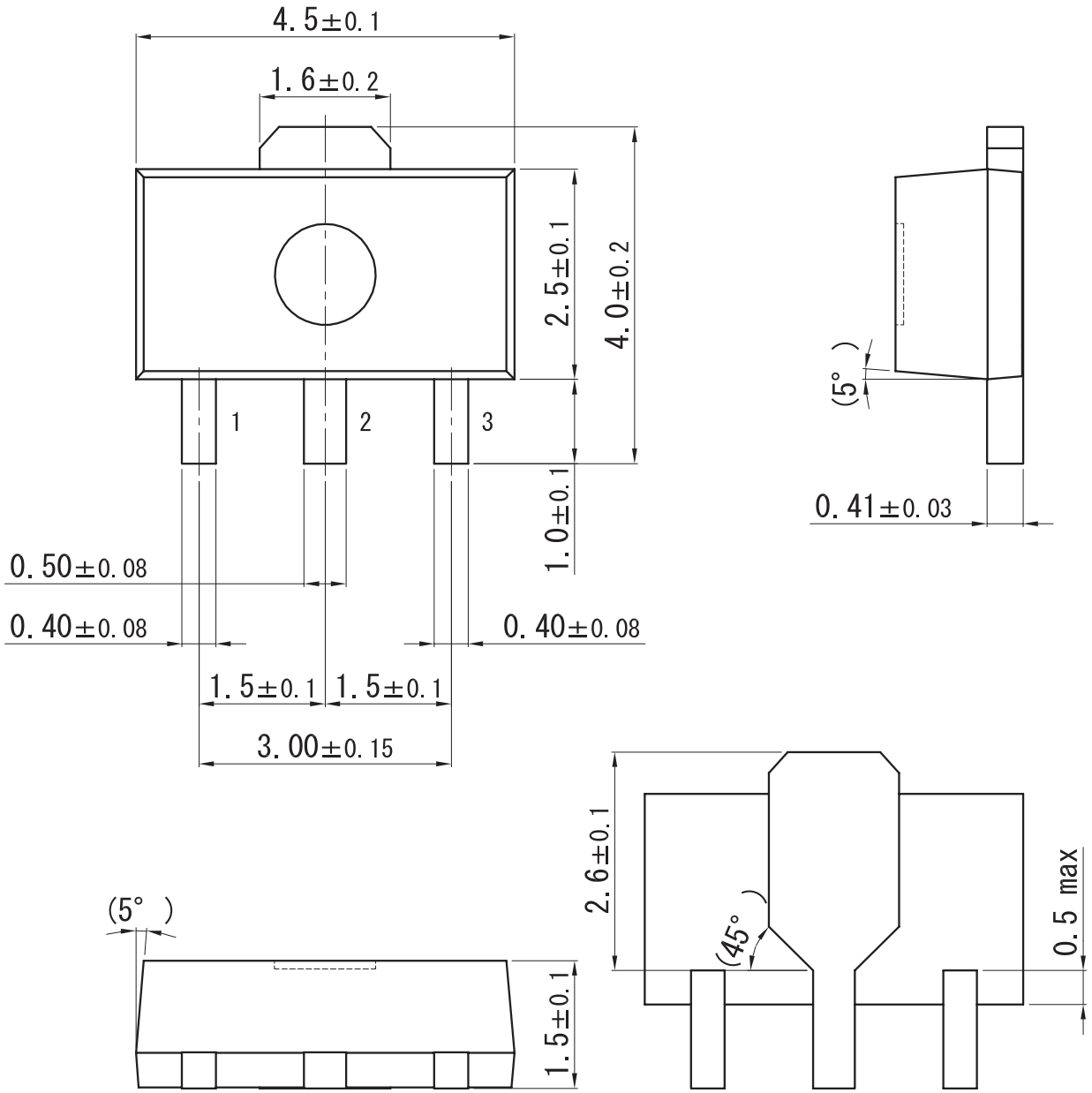


f_T — I_C

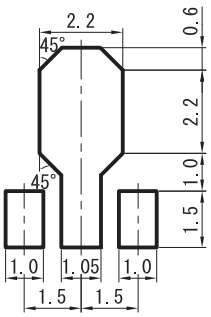


MiniP3-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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