

DSA7504

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): 1000 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}	-20	V
Emitter-base voltage (Collector open)	V_{EBO}	-7	V
Collector current	I_C	-4	A
Peak collector current	I_{CP}	-7	A
Collector power dissipation *	P_C	1	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

Note) *: Printed circuit board: Copper foil area of 1 cm² or more, and the board thickness of 1.7 mm for the collector portion
Absolute maximum rating without heat sink for P_C is 0.5 W

■ 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}	$I_C = -1 \text{ mA}, I_B = 0$	-20			V
Emitter-base voltage (Collector open)	V_{EBO}	$I_E = -10 \mu\text{A}, I_C = 0$	-7			V
Collector-base cutoff current (Emitter open)	I_{CBO}	$V_{CB} = -30 \text{ V}, I_E = 0$			-0.1	μA
Emitter-base cutoff current (Collector open)	I_{EBO}	$V_{EB} = -7 \text{ V}, I_C = 0$			-0.1	
Forward current transfer ratio *1, 2	h_{FE}	$V_{CE} = -2 \text{ V}, I_C = -2 \text{ A}$	120		315	—
Collector-emitter saturation voltage *1	$V_{CE(sat)}$	$I_C = -3 \text{ A}, I_B = -0.1 \text{ A}$		-0.7	-1.0	V
Transition frequency	f_T	$V_{CE} = -6 \text{ V}, I_C = -50 \text{ mA}$		180		MHz
Collector output capacitance (Common base, input open circuited)	C_{ob}	$V_{CB} = -20 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		30		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

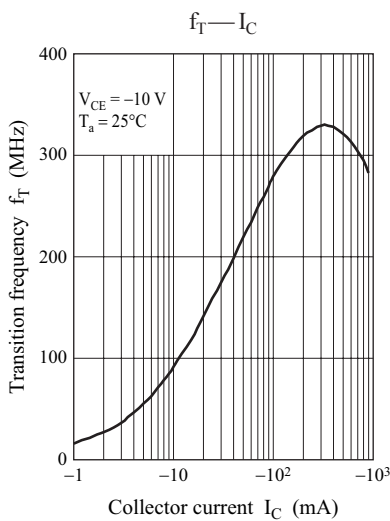
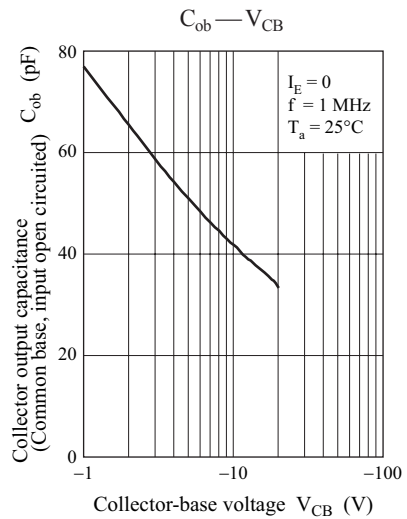
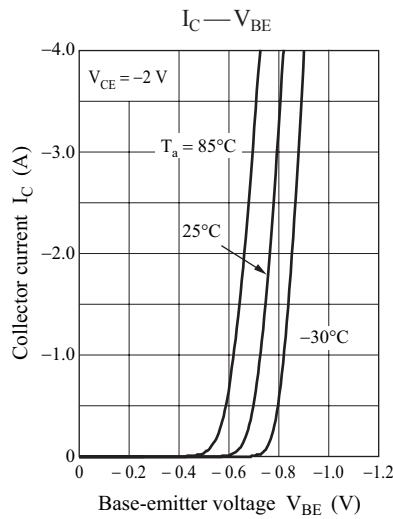
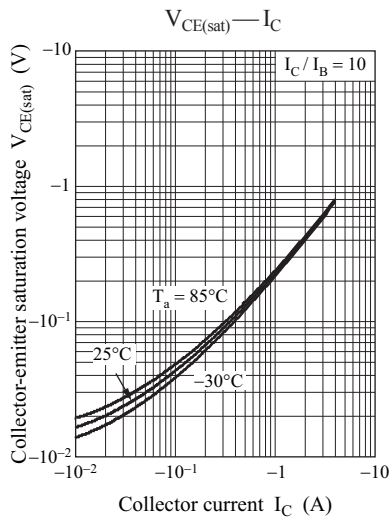
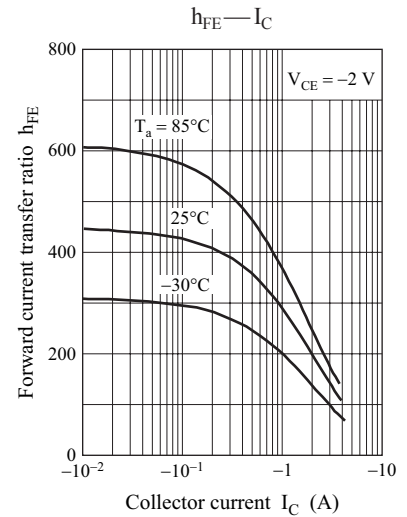
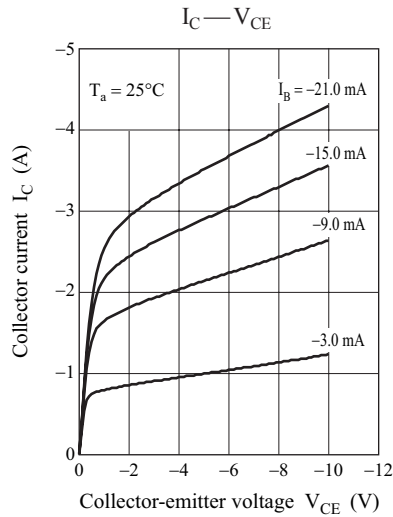
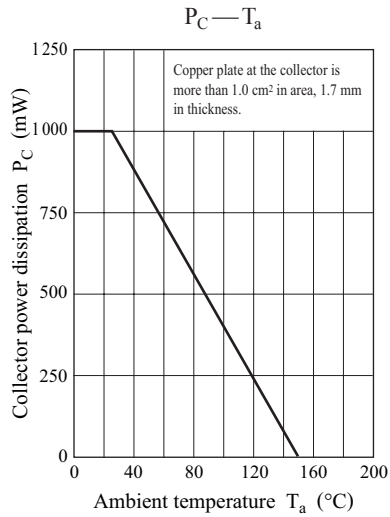
Code	Q	R	0
Rank	Q	R	No-rank
h_{FE}	120 to 205	180 to 315	120 to 315
Marking Symbol	4FQ	4FR	4F

Product of no-rank is not classified and have no marking symbol for rank.

■ Package

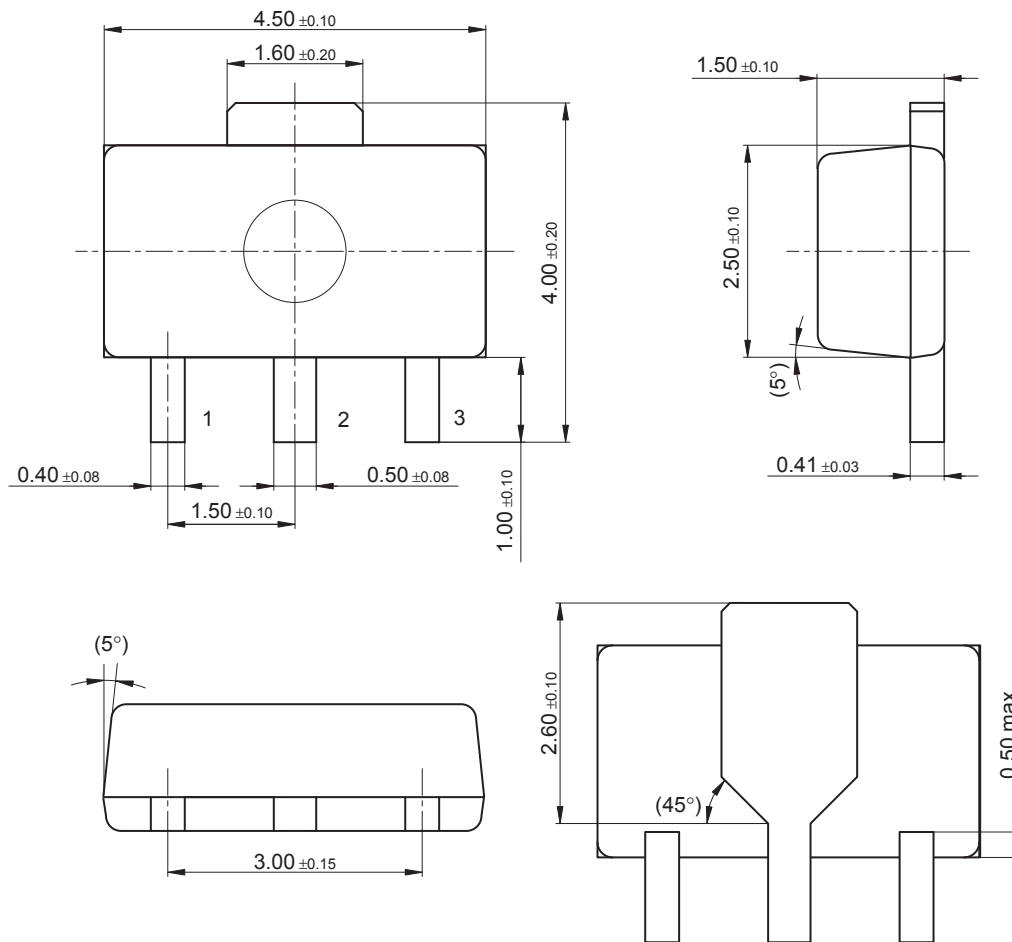
- Code
MiniP3-F2-B
- Pin Name
 1. Base
 2. Collector
 3. Emitter

■ Marking Symbol: 4F



MiniP3-F2-B

Unit: mm



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