

2SB1299

Silicon PNP epitaxial planar type

For power amplification

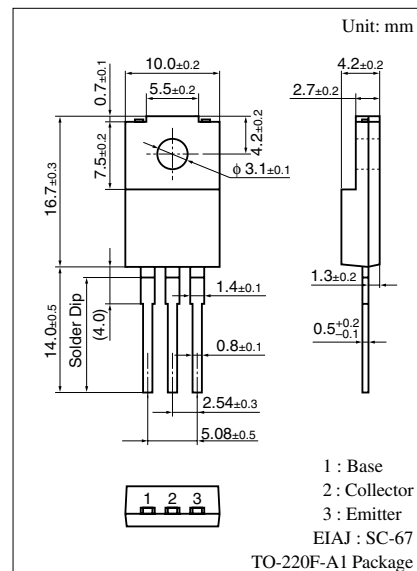
Complementary to 2SD1273

■ Features

- High forward current transfer ratio h_{FE}
- Satisfactory linearity of forward current transfer ratio h_{FE}
- 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 to base voltage	V_{CBO}	-60	V
Collector to emitter voltage	V_{CEO}	-60	V
Emitter to base voltage	V_{EBO}	-6	V
Peak collector current	I_{CP}	-6	A
Collector current	I_C	-3	A
Base current	I_B	-1	A
Collector power dissipation	$T_C = 25^\circ\text{C}$ $T_a = 25^\circ\text{C}$	P_C	W
		40 2	
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

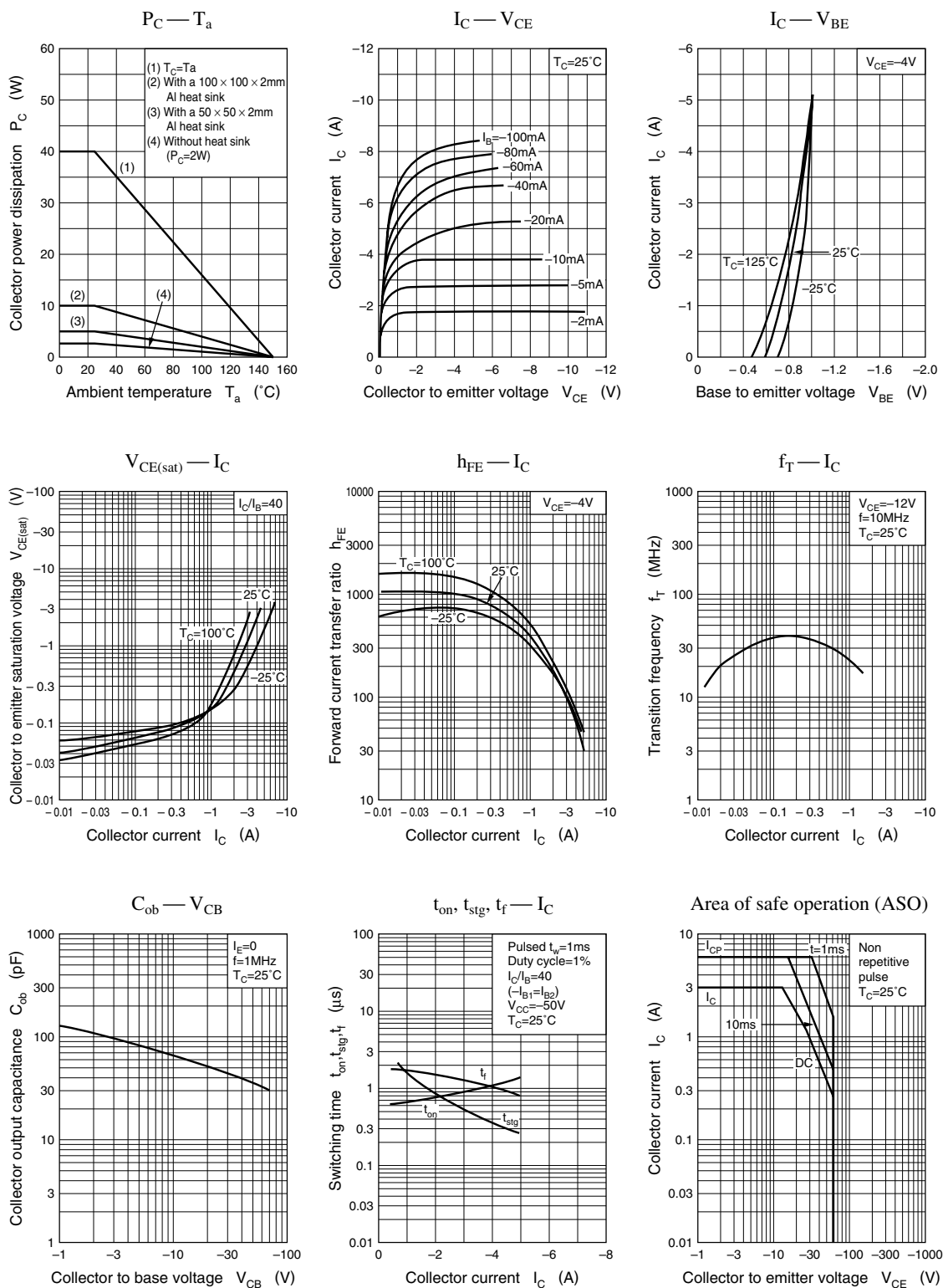


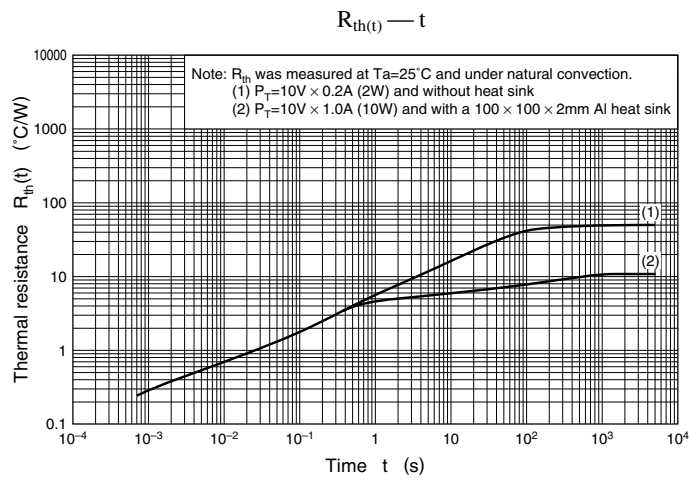
■ Electrical Characteristics $T_C = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -60\text{ V}, I_E = 0$			-100	μA
	I_{CEO}	$V_{CE} = -40\text{ V}, I_B = 0$			-100	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -6\text{ V}, I_C = 0$			-100	μA
Collector to emitter voltage	V_{CEO}	$I_C = -25\text{ mA}, I_B = 0$	-60			V
Forward current transfer ratio *	h_{FE}	$V_{CE} = -4\text{ V}, I_C = -0.5\text{ A}$	300		700	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2\text{ A}, I_B = -0.05\text{ A}$			-1	V
Transition frequency	f_T	$V_{CE} = -12\text{ V}, I_C = -0.2\text{ A}, f = 10\text{ MHz}$		30		MHz

Note) *: Rank classification

Rank	Q	P
h_{FE}	300 to 500	400 to 700





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