

2SB1473

Silicon PNP epitaxial planer type

For low-frequency output amplification
Complementary to 2SD2225

■ Features

- High collector to emitter voltage V_{CEO} .
- Satisfactory linearity of forward current transfer ratio h_{FE} .
- High transition frequency f_T .
- Allowing supply with the radial taping.

■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-120	V
Collector to emitter voltage	V_{CEO}	-120	V
Emitter to base voltage	V_{EBO}	-5	V
Peak collector current	I_{CP}	-1	A
Collector current	I_C	-0.5	A
Collector power dissipation	P_C^*	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C

* Printed circuit board: Copper foil area of 1cm² or more, and the board thickness of 1.7mm for the collector portion

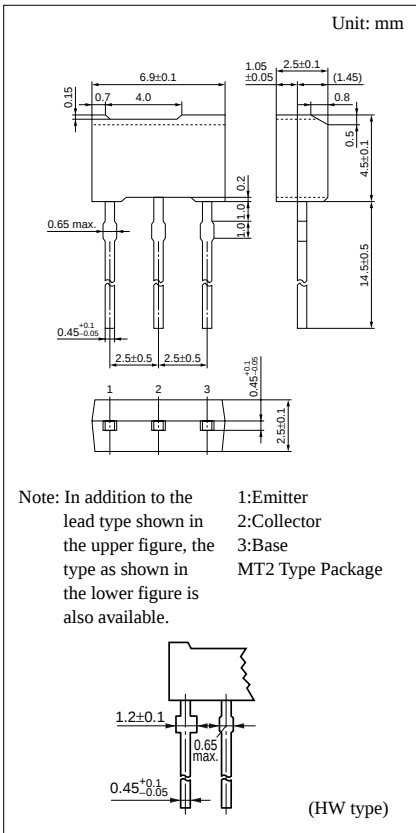
■ Electrical Characteristics (Ta=25°C)

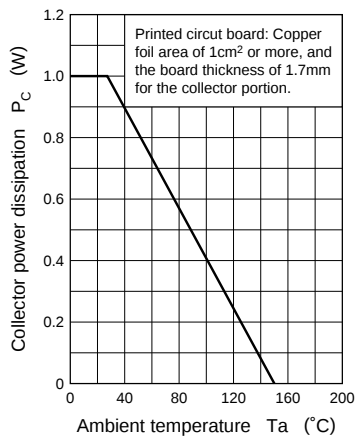
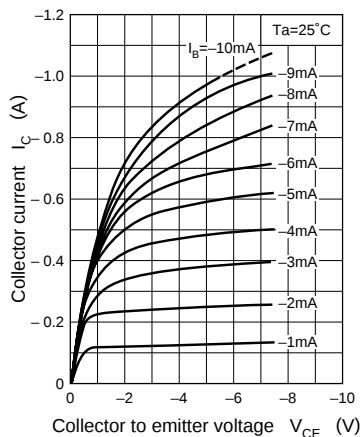
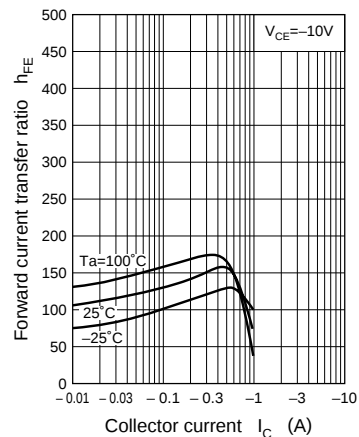
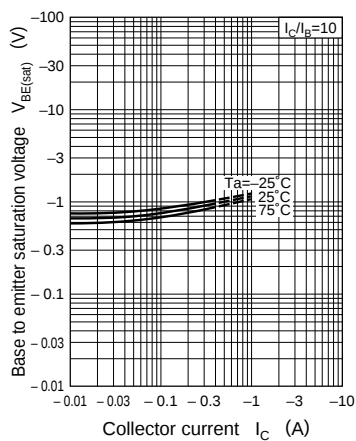
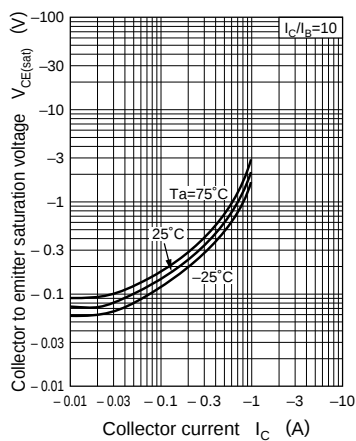
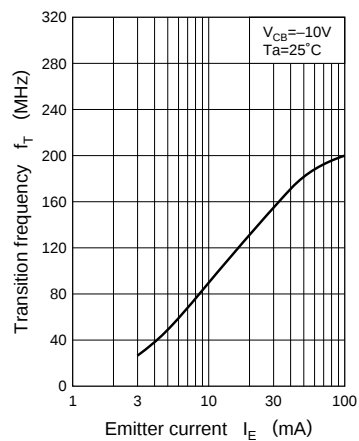
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector to emitter voltage	V_{CEO}	$I_C = -0.1mA, I_B = 0$	-120			V
Emitter to base voltage	V_{EBO}	$I_E = -10\mu A, I_C = 0$	-5			V
Forward current transfer ratio	h_{FE1}^{*1}	$V_{CE} = -10V, I_C = -150mA$	90		330	
	h_{FE2}	$V_{CE} = -5V, I_C = -500mA^{*2}$	50			
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300mA, I_B = -30mA^{*2}$			-1.0	V
Base to emitter saturation voltage	$V_{BE(sat)}$	$I_C = -300mA, I_B = -30mA^{*2}$			-1.2	V
Transition frequency	f_T	$V_{CB} = -10V, I_E = 50mA, f = 200MHz$		250		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$			30	pF

^{*2} Pulse measurement

^{*1} h_{FE1} Rank classification

Rank	Q	R	S
h_{FE1}	90 ~ 155	130 ~ 220	185 ~ 330



$P_C - T_a$  $I_C - V_{CE}$  $h_{FE} - I_C$  $V_{BE(\text{sat})} - I_C$  $V_{CE(\text{sat})} - I_C$  $f_T - I_E$  $C_{ob} - V_{CB}$ 