

2SB1321A

Silicon PNP epitaxial planer type

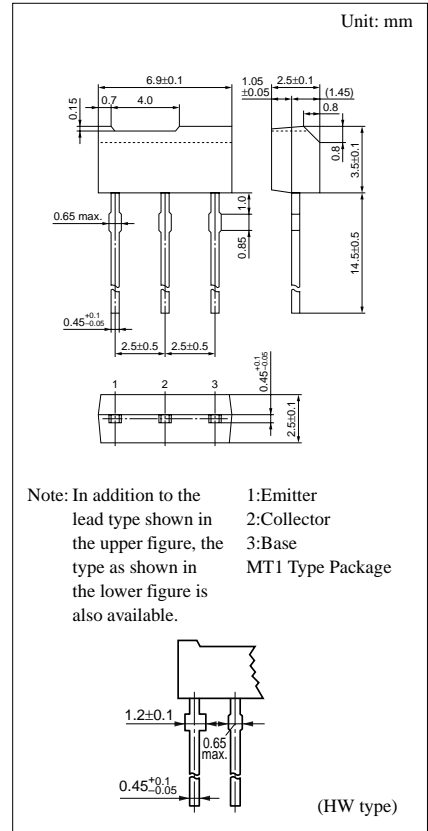
For low-frequency output amplification and driver amplification
Complementary to 2SD1992A

Features

- Allowing supply with the radial taping.
- Large collector power dissipation P_C . (600mW)

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-60	V
Collector to emitter voltage	V_{CEO}	-50	V
Emitter to base voltage	V_{EBO}	-7	V
Peak collector current	I_{CP}	-1	A
Collector current	I_C	-500	mA
Collector power dissipation	P_C	600	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 ~ +150	°C



Electrical Characteristics (Ta=25°C)

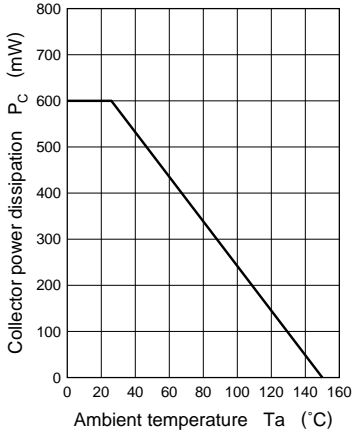
Parameter	Symbol	Conditions	min	typ	max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-0.1	μA
	I_{CEO}	$V_{CE} = -20V, I_B = 0$			-1	μA
Collector to base voltage	V_{CBO}	$I_C = -10\mu A, I_E = 0$	-60			V
Collector to emitter voltage	V_{CEO}	$I_C = -2mA, I_B = 0$	-50			V
Emitter to base voltage	V_{EBO}	$I_E = -10\mu A, I_C = 0$	-7			V
Forward current transfer ratio	h_{FE1}^*	$V_{CE} = -10V, I_C = -10mA$	85	160	340	
	h_{FE2}	$V_{CE} = -10V, I_C = -500mA^{*2}$	40	90		
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = -300mA, I_B = -30mA$		-0.35	-0.6	V
Transition frequency	f_T	$V_{CB} = -10V, I_E = 10mA, f = 200MHz$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		6	15	pF

*2 Pulse measurement

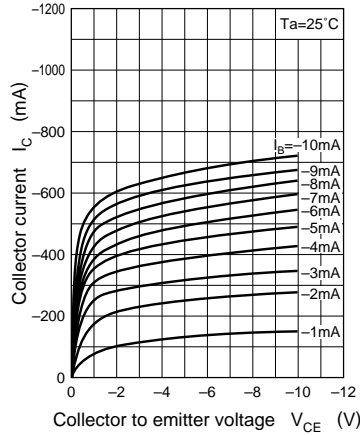
*1 h_{FE1} Rank classification

Rank	Q	R	S
h_{FE1}	85 ~ 170	120 ~ 240	170 ~ 340

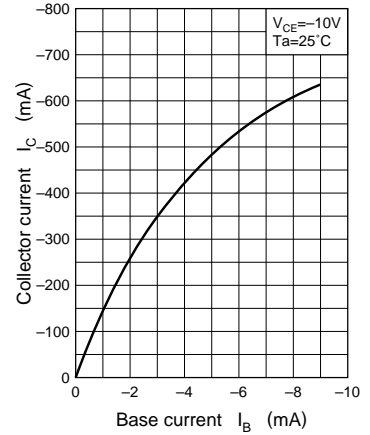
$P_C - T_a$



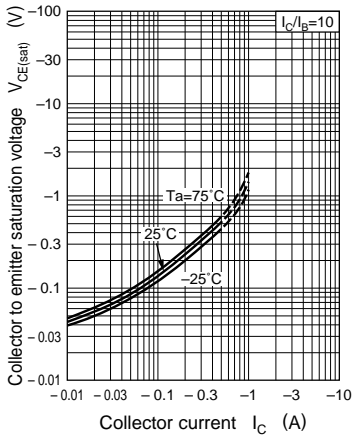
$I_C - V_{CE}$



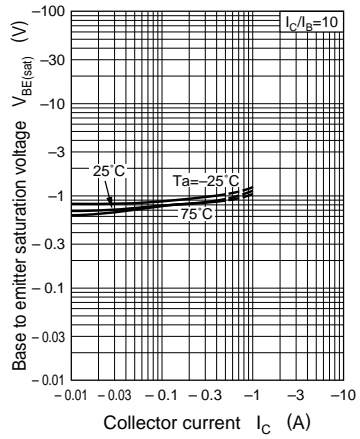
$I_C - I_B$



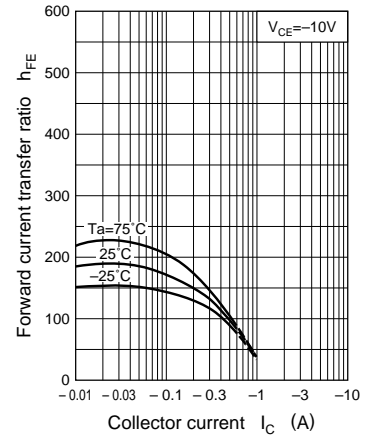
$V_{CE(sat)} - I_C$



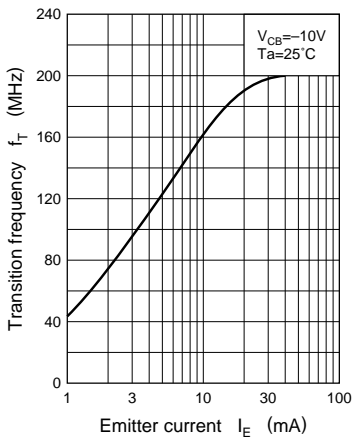
$V_{BE(sat)} - I_C$



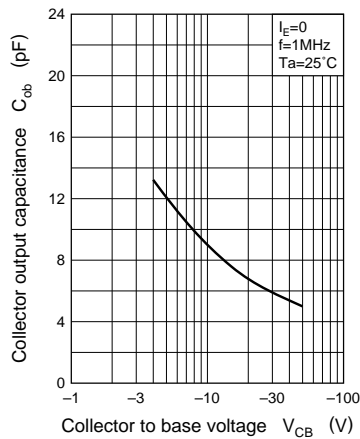
$h_{FE} - I_C$



$f_T - I_E$



$C_{ob} - V_{CB}$



$V_{CER} - R_{BE}$

