

2SB1030, 2SB1030A

Silicon PNP epitaxial planer type

For low-frequency amplification

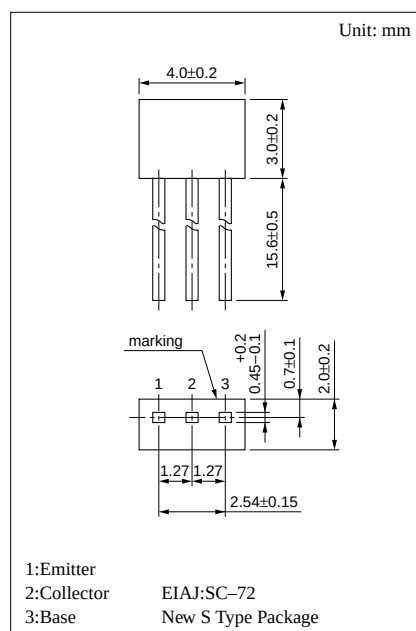
Complementary to 2SD1423 and 2SD1423A

Features

- Optimum for high-density mounting.
- Allowing supply with the radial taping.

Absolute Maximum Ratings (Ta=25°C)

Parameter		Symbol	Ratings	Unit
Collector to base voltage	2SB1030	V_{CBO}	-30	V
	2SB1030A		-60	
Collector to emitter voltage	2SB1030	V_{CEO}	-25	V
	2SB1030A		-50	
Emitter to base voltage		V_{EBO}	-7	V
Peak collector current		I_{CP}	-1	A
Collector current		I_C	- 0.5	A
Collector power dissipation		P_C	300	mW
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	-55 ~ +150	°C



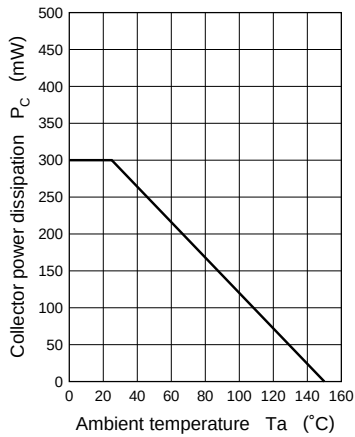
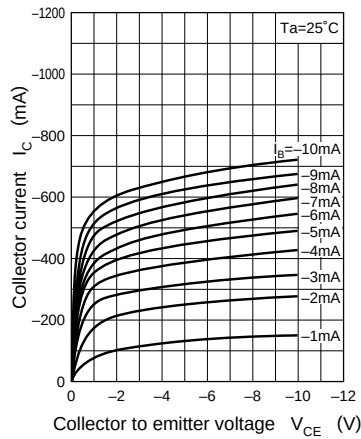
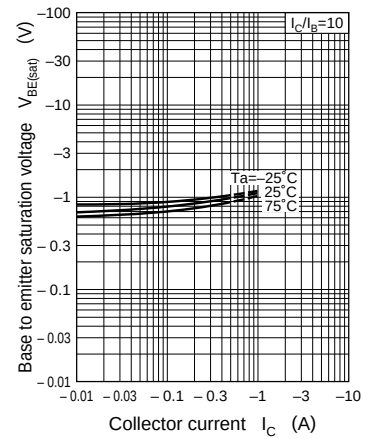
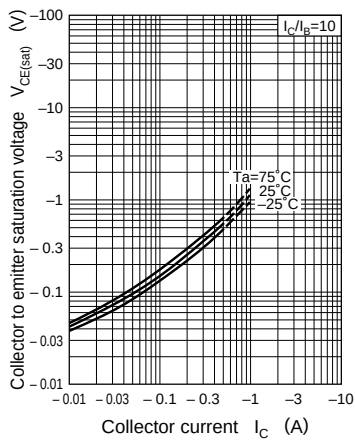
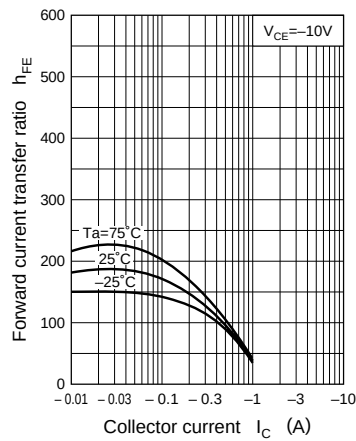
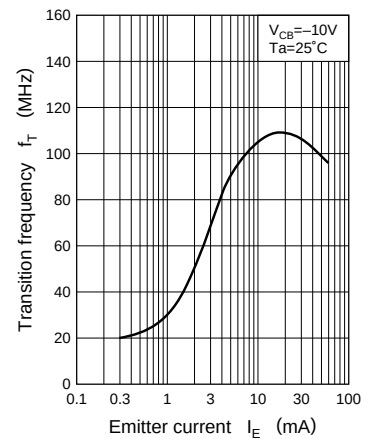
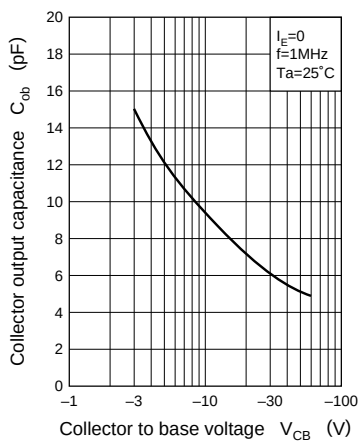
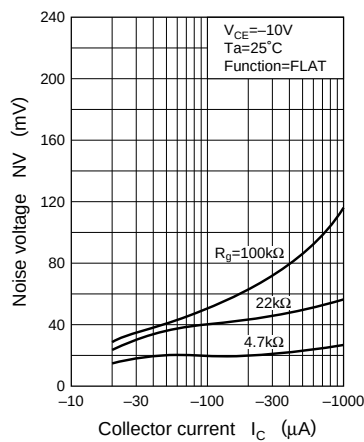
Electrical Characteristics (Ta=25°C)

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 = -10μA, I _E = 0	2SB1030 -30			V
			2SB1030A -60			
Collector to emitter voltage	V _{CEO}	I _C = -2mA, I _B = 0	2SB1030 -25			V
			2SB1030A -50			
Emitter to base voltage	V _{EBO}	I _E = -10μA, I _C = 0	-7			V
Forward current transfer ratio	h _{FE1} ^{*1}	V _{CE} = -10V, I _C = -150mA ^{*2}	85		340	
	h _{FE2}	V _{CE} = -10V, I _C = -500mA ^{*2}	40			
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = -300mA, I _B = -30mA ^{*2}		-0.35	-0.6	V
Transition frequency	f _T	V _{CB} = -10V, I _E = 50mA, 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

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

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