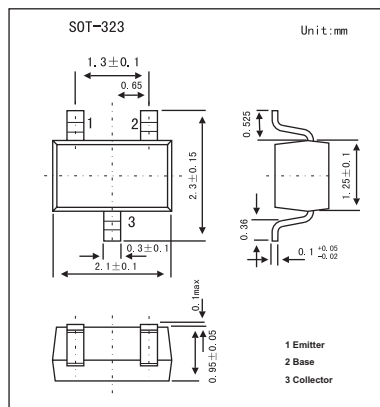


2SB1219A

■ Features

- Large collector current I_c .



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-60	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Peak collector current	I_{CP}	-1	A
Collector current	I_c	-500	mA
Collector power dissipation	P_c	150	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base voltage	V_{CB0}	$I_c = -10 \mu\text{A}, I_E = 0$	-60			V
Collector-emitter voltage	V_{CEO}	$I_c = -2 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage	V_{EBO}	$I_E = -10 \mu\text{A}, I_c = 0$	-5			V
Collector-base cutoff current	I_{CBO}	$V_{CB} = -20 \text{ V}, I_E = 0$			-0.1	μA
Forward current transfer ratio	h_{FE}	$V_{CE} = -10 \text{ V}, I_c = -150 \text{ mA}$	85		340	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -300 \text{ mA}, I_B = -30 \text{ mA}$		-0.35	-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = -300 \text{ mA}, I_B = -30 \text{ mA}$		-1.1	-1.5	
Transition frequency	f_T	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		6	15	pF

■ h_{FE} Classification

Marking	DQ	DR	DS	D
h_{FE}	85~170	120~240	170~340	85~340