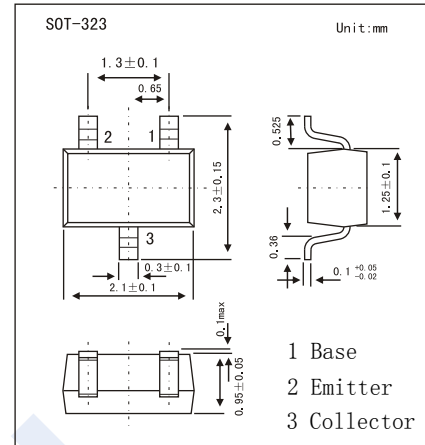


PNP Transistors

2SB1219A

■ Features

- Large collector current I_c
- Complementary to 2SD1820A



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-60	V
Collector - Emitter Voltage	V_{CE0}	-50	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-0.5	A
Collector Current - Pulse	I_{CP}	-1	
Collector Power Dissipation	P_c	150	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature range	T_{stg}	-55 to 150	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_c = -100 \mu\text{A}$, $I_E = 0$	-60			V
Collector-emitter breakdown voltage	V_{CE0}	$I_c = -2 \text{ mA}$, $I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu\text{A}$, $I_c = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -50\text{V}$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4\text{V}$, $I_c = 0$			-0.1	
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	
DC current gain	h_{FE}	$V_{CE} = -10\text{V}$, $I_c = -150 \text{ mA}$	85		340	
		$V_{CE} = -10\text{V}$, $I_c = -500 \text{ mA}$	40			
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1\text{MHz}$		6	15	pF
Transition frequency	f_T	$V_{CE} = -10\text{V}$, $I_c = -50 \text{ mA}$, $f = 200\text{MHz}$		200		MHz

■ Classification of $h_{FE}(1)$

Type	2SB1219A-Q	2SB1219A-R	2SB1219A-S	2SB1219A
Range	85-170	120-240	170-340	85-340
Marking	DQ	DR	DS	D

PNP Transistors

2SB1219A

■ Typical Characteristics

