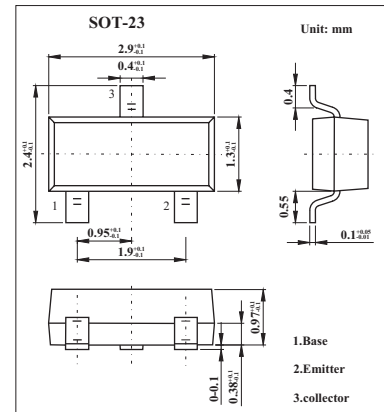


Silicon PNP Triple Diffused Type

2SA1255

■ Features

- High voltage.
- Small package.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-200	V
Collector-emitter voltage	V_{CE0}	-200	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_C	-50	mA
Base current	I_B	-20	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	I_{CBO}	$V_{CB} = -200\text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	μA
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1\text{ mA}, I_E = 0$	-200			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{ mA}, I_B = 0$	-200			V
DC current gain	h_{FE}	$V_{CE} = -3\text{ V}, I_C = -10\text{ mA}$	70		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{ mA}, I_B = -1\text{ mA}$		-0.2	-1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10\text{ mA}, I_B = -1\text{ mA}$		-0.75	-1.5	V
Transition frequency	f_T	$V_{CE} = -10\text{ V}, I_C = -2\text{ mA}$	50	100		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$		3	7	pF
Turn-on time	t_{on}	pulse width = 5 μs , duty cycle $\leq 2\%$		0.3		μs
Storage time	t_{stg}	$I_{B2} = -I_{B1} = 0.6\text{ Ma}$		2		μs
Fall time	t_f	$V_{CC} = -50\text{ V}, I_C = -6\text{ mA}$		0.4		μs

■ hFE Classification

Marking	OO	OY
Rank	O	Y
hFE	70~140	120~240