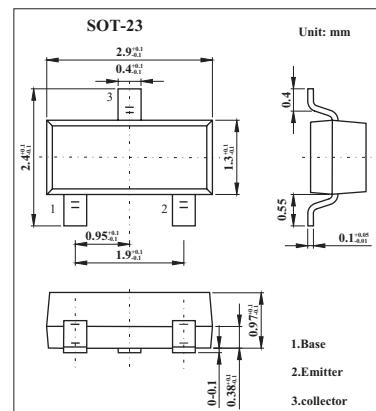


Epitaxial Planar PNP Silicon Transistor

2SA1455K

■ Features

- High breakdown voltage: $V_{CEO} = -120V$
- Low noise design: $NF = 0.2\text{dB}(\text{Typ.})$



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CEO}	-120	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-50	mA
Collector power dissipation	P_C	200	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 breakdown voltage	BV_{CBO}	$I_C = -50\mu\text{A}$	-120			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1\text{mA}$	-120			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -50\mu\text{A}$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -100\text{V}$			-0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4\text{V}$			-0.5	μA
DC current transfer ratio	h_{FE}	$V_{CE} = -6\text{V}, I_C = -2\text{mA}$	180		820	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.5	V
Output capacitance	f_T	$V_{CE} = -12\text{V}, I_E = 2\text{mA}, f = 30\text{MHz}$		140		MHz
Transition frequency	C_{ob}	$V_{CB} = -12\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$		3.2		pF

■ hFE Classification

Marking	G		
	R	S	E
hFE	180~390	270~560	390~820