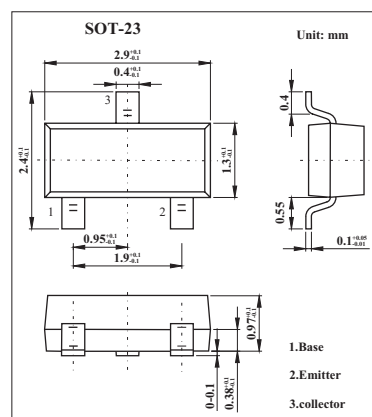


High-voltage Amplifier Transistor

2SA1514K

■ Features

- High breakdown voltage.

■ 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	0.2	W
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	Testconditions	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
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -1\text{mA}$			-0.5	V
DC current transfer ratio	h_{FE}	$V_{CE} = -6\text{V}, I_C = -2\text{mA}$	180		560	
Output capacitance	f_T	$V_{CE} = -12\text{V}, I_E = 2\text{mA}, f = 100\text{MHz}$		140		MHz
Transition frequency	C_{ob}	$V_{CB} = -12\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$		3.2		pF

■ h_{FE} Classification

Marking	RR	RS
Rank	R	S
h_{FE}	180~390	270~560