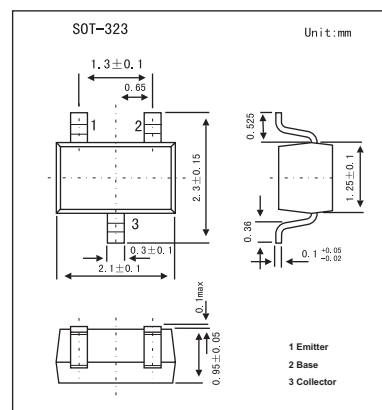


High-voltage Amplifier Transistor

2SC4102

■ Features

- High breakdown voltage.($V_{CE0} = 120V$)

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

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	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C=50\mu A$	120			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C=1mA$	120			V
Emitter-base breakdown voltage	V_{EBO}	$I_E=50\mu A$	5			V
Collector cutoff current	I_{CBO}	$V_{CB}=100V$			0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=4V$			0.5	μA
DC current transfer ratio	h_{FE}	$V_{CE}=6V, I_C=2mA$	180		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			0.5	V
Output capacitance	C_{ob}	$V_{CB}=12V, I_E=0A, f=1MHz$		2.5		pF
Transition frequency	f_T	$V_{CE}=-12V, I_E=2mA, f=100MHz$		140		MHz

■ h_{FE} Classification

Marking	TR	TS
Rank	R	S
h_{FE}	180~390	270~560