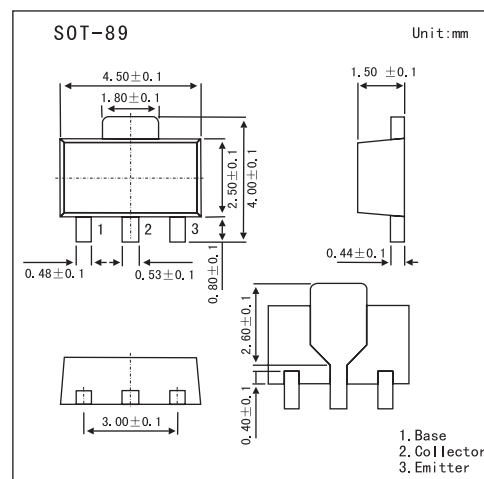


Small Signal Transistor

2SC3444

■ Features

- High voltage $V_{CE0}=60V$.
- High collector current ($I_c=1A$).
- High collector dissipation $P_c=500mW$.
- Low $V_{CE(sat)}$: $V_{CE(sat)}=0.11V$ typ(@ $I_c=500mA, I_b=25mA$).
- Small package for mounting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	60	V
Emitter-base voltage	V_{EB0}	6	V
Collector-emitter voltage	V_{CE0}	60	V
Peak collector current	I_{CM}	2	A
Collector current	I_c	1	A
Collector dissipation ($T_a=25^\circ C$)	P_c	500	mW
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	$V_{(BR)CB0}$	$I_c=10\mu A, I_E=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EB0}$	$I_E=10\mu A, I_c=0$	6			V
Collector-emitter breakdown voltage	$V_{(BR)CE0}$	$I_c=2mA, R_{BE}=\infty$	60			V
Collector cutoff current	I_{CB0}	$V_{CB}=50V, I_E=0$			0.2	μA
Emitter cutoff current	I_{EB0}	$V_{EB}=4V, I_c=0$			0.2	μA
DC current gain	h_{FE}	$V_{CE}=4V, I_c=100mA$	55		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=500mA, I_b=25mA$		0.11	0.3	V
Gain bandwidth product	f_T	$V_{CE}=2V, I_E=-10mA$		80		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		14		pF

■ h_{FE} Classification

Marking	DC	DD	DE
h_{FE}	55~110	90~180	150~300