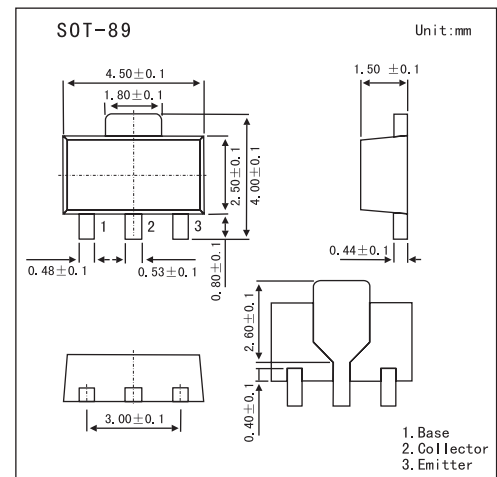


## Small Signal Transistor

## 2SC5214

## ■ Features

- High  $f_T$   $f_T=100\text{MHz}$  typ.
- Excellent linearity of dc forward current gain.
- High collector current  $I_{CM}=1.5\text{A}$ .
- Small package for mounting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	30	V
Emitter-base voltage	$V_{EB0}$	4	V
Collector-emitter voltage	$V_{CE0}$	25	V
Peak collector current	$I_{CM}$	1.5	A
Collector current	$I_C$	1	A
Collector dissipation	$P_C$	500	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	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}, I_E=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	4			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu\text{A}, R_{BE}=\infty$	25			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=25\text{V}, I_E=0$			1	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=2\text{V}, I_C=0$			1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE}=1\text{V}, I_C=500\text{mA}$	55		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=25\text{mA}$			0.5	V
Gain bandwidth product	$f_T$	$V_{CE}=6\text{V}, I_E=-10\text{mA}$		100		MHz

■  $h_{FE}$  Classification

Marking	WC	WD	WE
$h_{FE}$	55~110	90~180	150~300