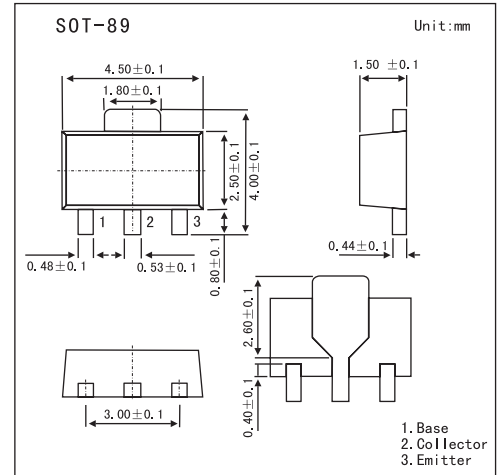


## Small Signal Transistor

## 2SC5212

## ■ Features

- Low collector saturation voltage  $V_{CE(sat)}=0.2V$  typ.
- High  $f_T$   $f_T=180MHz$  typ.
- Excellent linearity of dc forward current gain.
- High collector current  $I_{CM}=1A$ .
- Small package for mounting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	25	V
Emitter-base voltage	$V_{EBO}$	4	V
Collector-emitter voltage	$V_{CEO}$	20	V
Peak collector current	$I_{CM}$	1	A
Collector current	$I_C$	700	mA
Collector dissipation	$P_C$	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	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	4			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=100\mu A, R_{BE}=\infty$	20			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=25V, I_E=0$			1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=2V, I_C=0$			1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=4V, I_C=100mA$	150		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=25mA$		0.2	0.5	V
Gain bandwidth product	$f_T$	$V_{CE}=6V, I_E=-10mA$		180		MHz

■  $h_{FE}$  Classification

Marking	UE	UF	UG
$h_{FE}$	150~300	250~500	400~800