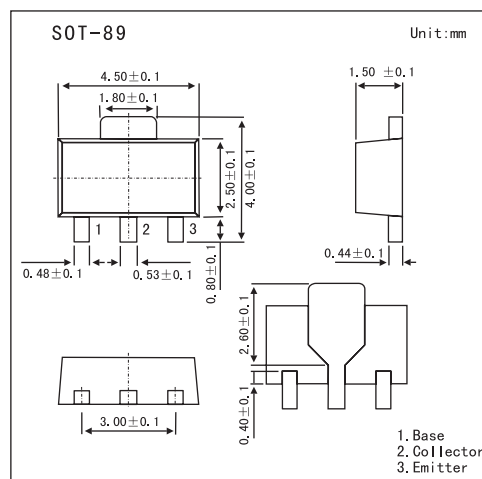


## Small Signal Transistor

## 2SC3439

## ■ Features

- High  $h_{FE}=400$  to 1800.
- High collector current ( $I_{CM}=3A, I_C=1.5A$ )
- High collector dissipation  $P_C=500mW$
- Low  $V_{CE(sat)}$   $V_{CE(sat)}=0.2V$  typ(@ $I_C=1A, I_B=20mA$ )
- Small package for mounting.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	30	V
Emitter-base voltage	$V_{EBO}$	6	V
Collector-emitter voltage	$V_{CEO}$	25	V
Peak collector current	$I_{CM}$	3	A
Collector current	$I_C$	1.5	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	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	25			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=20V, I_E=0$			0.1	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=2V, I_C=0$			0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=6V, I_C=500mA$	400		1800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=20mA$		0.25	0.5	V
Gain bandwidth product	$f_T$	$V_{CE}=10V, I_E=-10mA$		130		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$		17		pF

■  $h_{FE}$  Classification

Marking	HG	HH	HJ
$h_{FE}$	400~800	600~1200	900~1800