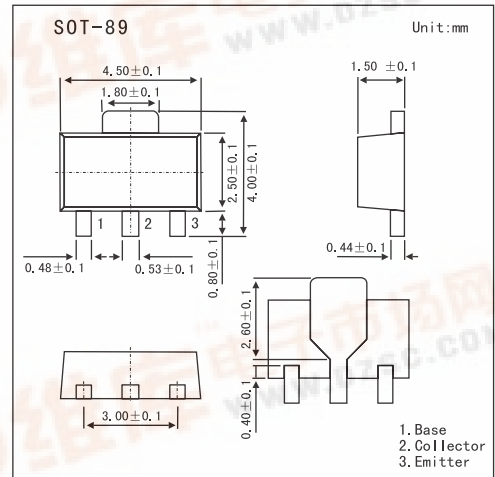


SMD Type Transistors

Small Signal Transistor
2SC5209

■ Features

- High voltage $V_{CE0}=50V$.
- Small package for mounting.
- High $h_{FE} = 600$ to 1800 .



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	50	V
Emitter-base voltage	V_{EB0}	6	V
Collector-emitter voltage	V_{CE0}	50	V
Peak collector current	I_{CM}	2	A
Collector current	I_C	1	A
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	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, R_{BE}=\infty$	50			V
Collector cutoff current	I_{CBO}	$V_{CB}=40V, I_E=0$			0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=2V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=100mA$	600		1800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=10mA$.15	0.5	V
Gain bandwidth product	f_T	$V_{CE}=10V, I_E=-10mA$		130		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		12		pF

■ h_{FE} Classification

Marking	RH	RJ
h_{FE}	600~1200	900~1800

