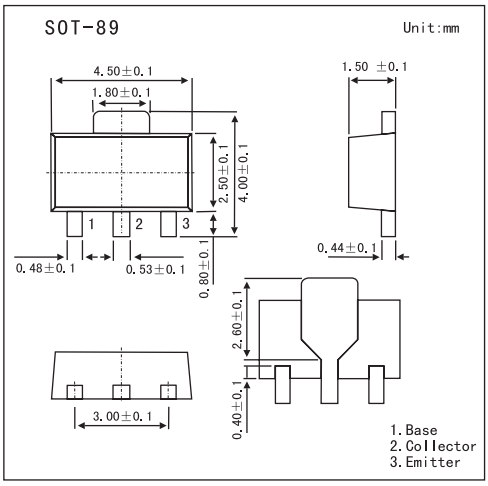
Small Signal Transistor

2SC5209



■ Features

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

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	50	V
Emitter-base voltage	V_{EBO}	6	V
Collector-emitter voltage	V_{CEO}	50	V
Peak collector current	I_{CM}	2	A
Collector current	I_C	1	A
Collector dissipation	P_C	500	mW
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Colllector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,I_E=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	6			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,R_{BE}=∞	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
hFE	600～1200	900～1800