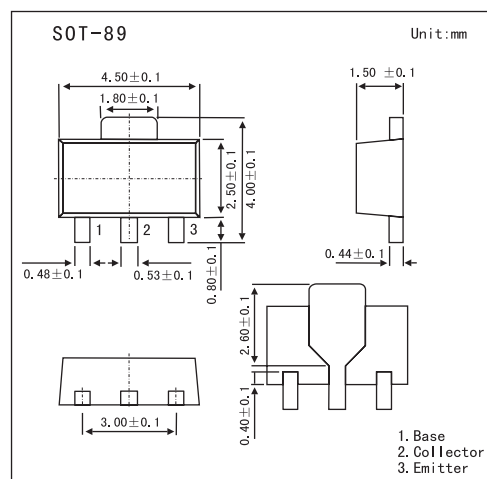


Silicon PNP Epitaxial

2SA1947

■ 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_{CBO}	-30	V
Emitter-base voltage	V_{EBO}	-4	V
Collector-emitter voltage	V_{CEO}	-25	V
Peak collector current	I_{CM}	-1.5	A
Collector current	I_C	-1	A
Collector dissipation ($T_a=25^\circ\text{C}$)	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	Test conditions	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	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=-2\text{V}, I_C=0$			-1	μA
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	ABC	ABD	ABE
h_{FE}	55~110	90~180	150~300