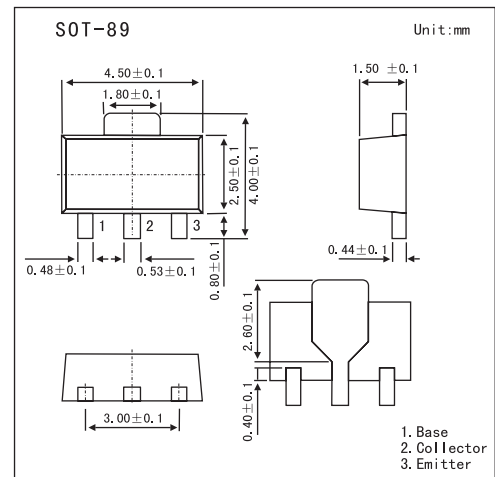


## Silicon PNP Epitaxial

## 2SA1947

## ■ Features

- High fr: fr=100MHz typ
- Excellent linearity of DC forward current gain
- High collector current  $I_{CM}=-1.5A$
- Small package for mounting

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-30	V
Emitter-base voltage	$V_{EB0}$	-4	V
Collector-emitter voltage	$V_{CE0}$	-25	V
Peak collector current	$I_{CM}$	-1.5	A
Collector current	$I_C$	-1	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	Testconditions	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	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-4			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-100\mu A, R_{BE}=\infty$	-25			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	$h_{FE}$	$V_{CE}=-1V, I_C=-500mA$	55		300	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-25mA$			-0.5	V
Gain bandwidth product	fr	$V_{CE}=-6V, I_E=-10mA$		100		MHz

## ■ hFE Classification

Marking	ABC	ABD	ABE
hFE	55~110	90~180	150~300