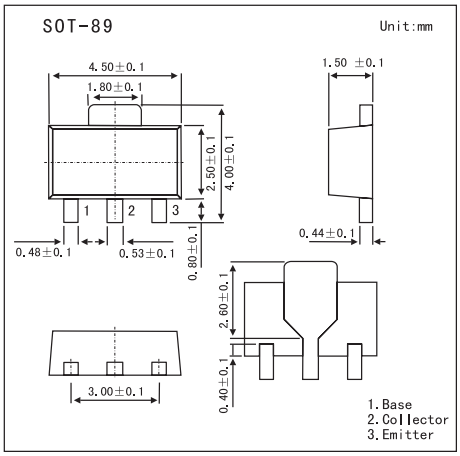
Silicon PNP Epitaxia

2SA1948



Features

- High fT fT=200MHz typ, low Cob Cob=3.5pF typ
- Small package for mounting
- High voltage VCEO=120V
- High collector dissipation Pc=500mW

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-120	V
Collector-emitter voltage	V_{CEO}	-120	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Collector dissipation	P_C	500	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = -10 μA, I_E = 0	-120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -1 mA,R_{BE} = ∞	-120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = -10 μA, I_C = 0	-5			V
Collector cut-off current	I_{CBO}	V_{CB} = -100 V, I_E = 0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB} = -4 V, I_C = 0			-0.1	μA
DC current gain	h_{FE}	V_{CE} = -10 V, I_C = -10 mA	150		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -50 mA, I_B = -2.5 mA		-0.17	-0.6	V
Gain band width product	f_T	V_{CE} = -10 V, I_E = 10 mA		200		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		3.5		pF

hFE Classification

Marking	ACE	ACF	ACG
Rank	E	F	G
hFE	150～300	250～500	400～800