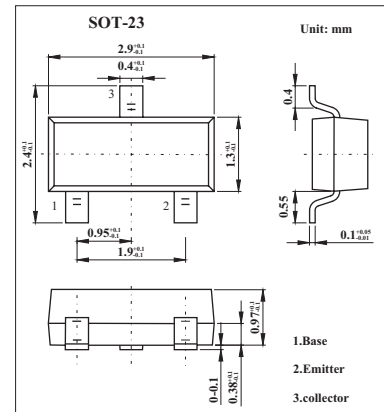


PNP Silicon Transistor

2SA1981SF

■ Features

- High h_{fe} : $h_{FE}=100$ to 320

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-35	V
Collector-emitter voltage	V_{CEO}	-30	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-800	mA
Collector dissipation	P_C	200	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	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C=-500\mu\text{A}$, $I_E=0$	-35			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C=-1\text{mA}$, $I_B=0$	-30			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=-50\mu\text{A}$, $I_C=0$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB}=-35\text{V}$, $I_E=0$			-0.1	μA
Emitter cutoff current	I_{EBO}	$V_{EB}=-5\text{V}$, $I_C=0$			-0.1	μA
DC current transfer ratio	h_{FE}	$V_{CE}=-1\text{V}$, $I_C=-100\text{mA}$	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=-500\text{mA}/-20\text{mA}$			-0.5	V
Transition frequency	f_T	$V_{CE}=-5\text{V}$, $I_E=10\text{mA}$		120		MHz
Output capacitance	C_{ob}	$V_{CB}=-10\text{V}$, $I_E=0$, $f=1\text{MHz}$		19		pF

■ h_{FE} Classification

Marking	EA	
Rank	O	Y
h_{FE}	100~200	160~320