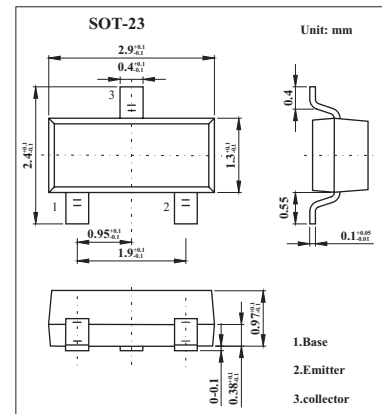


PNP Epitaxial Planar Silicon Transistor

2SA1682

■ Features

- High breakdown voltage.
- Small reverse transfer capacitance and excellent high frequency characteristic (Cre : 1.5pF typ).



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	-300	V
Collector-emitter voltage	V _{CEO}	-300	V
Emitter-base voltage	V _{EB0}	-5	V
Collector current	I _c	-50	mA
Collector current (pulse)	I _{CP}	-100	mA
Collector dissipation	P _c	250	mW
Jumction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

2SA1682

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = -200V , I _E = 0			-0.1	μA
Emitter cutoff current	I _{EBO}	V _{EB} = -4V , I _C = 0			-0.1	μA
DC current gain	h _{FE1}	V _{CE} = -6V , I _C = -0.1 mA	100		320	
	h _{FE2}	V _{CE} = -6V , I _C = -1 mA	100			
Gain bandwidth product	f _T	V _{CE} = -30V , I _C = -10 mA		70		MHz
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -10mA , I _B = -3mA			-1.0	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -10mA , I _B = -3mA			-1.0	V
Collector-to-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA , I _E = 0	-300			V
Collector-to-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA , R _{BE} = ∞	-300			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA , I _C = 0	-5			V
Output capacitance	C _{ob}	V _{CB} = -30V , f = 1MHz		2.4		pF
Reverse transfer capacitance	C _{re}	V _{CB} = -30V , f = 1MHz		1.5		pF
DC current gain ratio	h _{FE} ^{ratio}	h _{FE1} / h _{FE2}		1.0		

■ hFE Classification

Marking	CS	
	4	5
hFE	100~200	160~320