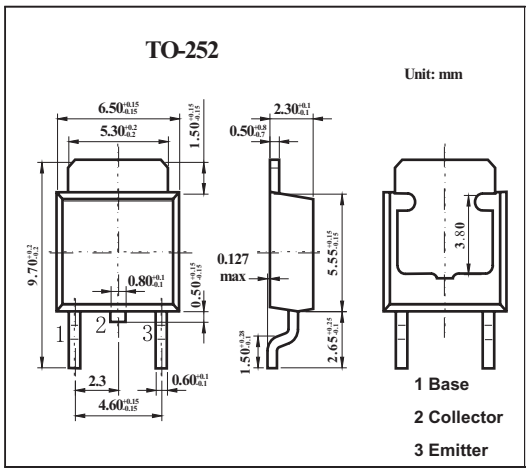
Low Frequency Transistor

2SB1412



Features

- Low $V_{CE(sat)}$.
- PNP silicon transistor.

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-30	V
Collector-emitter voltage	V_{CEO}	-20	V
Emitter-base voltage	V_{EBO}	-6	V
Collector current	I_C	-5	A(DC)
		-10	A (Pulse)*
Collector current pulse	I_{CP}	-10	A
Collector power dissipation	P_C	1	W
(Tc=25℃)	P_C	10	W
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55 to +150	℃

* Single pulse ,PW=10ms

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	I_C=-50μA	-30			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-1mA	-20			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=-50μA	-6			V
Collector cutoff current	I_{CBO}	V_{CB}=-20V			-0.5	μA
Emitter cutoff current	I_{EBO}	V_{EB}=-5V			-0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= -4A, I_B= -0.1A		-0.35	-1.0	V
DC current transfer ratio	h_{FE}	V_{CE}= -2V, I_C= -0.5A	82		390	
Output capacitance	f_T	V_{CE}= -6V, I_E=50mA, f=100MHz		120		MHz
Transition frequency	Cob	V_{CB}= -20V,I_E=0A,f=1MHz		60		pF

h_{FE} Classification

Rank	P	Q	R
hFE	82～180	120～270	180～390