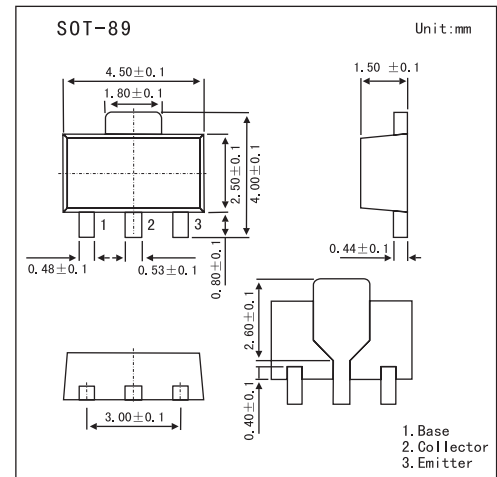


## Power Transistor

## 2SB1308

## ■ Features

- Low saturation voltage, typically  
 $V_{CE(sat)} = -0.45V$  (Max.) at  $I_C/I_B = -1.5A / -0.15A$ .
- Excellent DC current gain characteristics.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	-30	V
Collector-emitter voltage	$V_{CEO}$	-20	V
Emitter-base voltage	$V_{EBO}$	-6	V
Collector current	$I_C$	-3	A
Collector current(Pulse)	$I_{CP}^*$	-5	A
Collector power dissipation	$P_C$	0.5	W
Junction temperature	$T_j$	150	$^\circ C$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ C$

\* Single pulse,  $P_w=10ms$

■ Electrical Characteristics  $T_a = 25^\circ C$ 

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$BV_{CB0}$	$I_C=-50\mu A$	-30			V
Collector-emitter breakdown voltage	$BV_{CEO}$	$I_C=-1mA$	-20			V
Emitter-base breakdown voltage	$BV_{EBO}$	$I_E=-50\mu A$	-6			V
Collector cutoff current	$I_{CBO}$	$V_{CB}=-20V$			-0.5	$\mu A$
Emitter cutoff current	$I_{EBO}$	$V_{EB}=-5V$			-0.5	$\mu A$
Collector-emitter saturation voltage	$h_{FE}$	$V_{CE}=-2V, I_C=-0.5A$	82		390	
DC current transfer ratio	$V_{CE(sat)}$	$I_C=-1.5A, I_B=-0.15A$			-0.45	V
Transition frequency	$C_{ob}$	$V_{CE}=-6V, I_E=50mA, f=100MHz$		120		MHz
Output capacitance	$f_T$	$V_{CB}=-20V, I_E=0A, f=1MHz$		60		pF

## ■ hFE Classification

Marking	BF		
Rank	P	Q	R
hFE	82~180	120~270	180~390