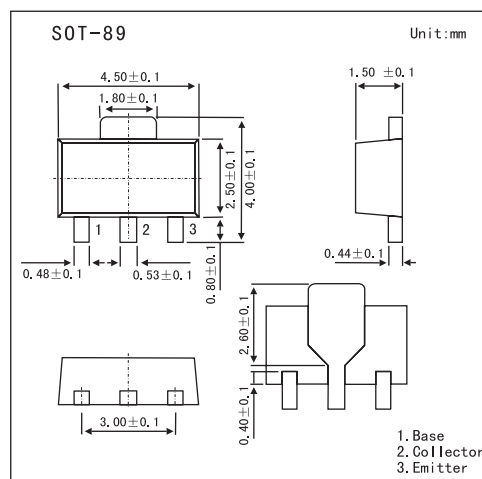


2SB1189

■ Features

- High breakdown voltage, $BV_{CEO}=-80V$, and high current, $I_C=-0.7A$.



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

Parameter	Symbol	Rating	Unit
Collector-base Voltage	V_{CBO}	-80	V
Collector-emitter Voltage	V_{CEO}	-80	V
Emitter-base Voltage	V_{EBO}	-5	V
Collector current	I_C	-0.7	A
Collector power dissipation	P_C	0.5	W
Jumction temperature	T_j	150	$^{\circ}C$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}C$

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltae	BV_{CBO}	$I_C = -50 \mu A$	-80			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -2mA$	-80			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -50 \mu A$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -50V$			-0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4V$			-0.5	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$		-0.2	-0.4	V
DC current transfer ratio	h_{FE}	$V_{CE} = -3V, I_C = -0.1A$	82		390	
Transition frequency	f_T	$V_{CE} = -10V, I_E = 50mA, f = 100MHz$		100		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		14	20	pF

■ hFE Classification

Marking	BD		
	P	Q	R
hFE	82~180	120~270	180~390