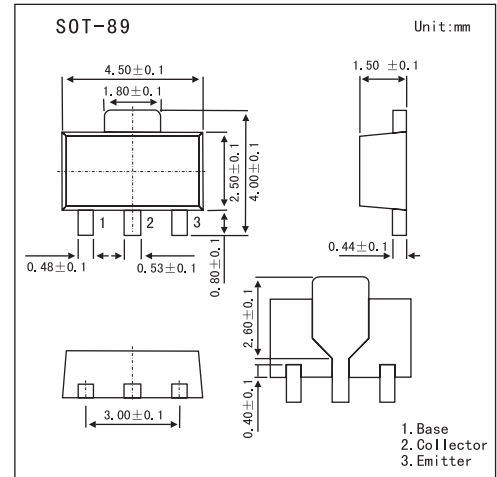


Silicon PNP Epitaxial Planar

2SB1571

■ Features

- Low $V_{CE(sat)}$: $V_{CE(sat)} \leq -0.35\text{ V}$

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current (DC)	$I_{C(DC)}$	-5	A
Collector Current (pulse) *	$I_{C(Pulse)}$	-8	A
Base Current (DC)	$I_{B(DC)}$	-0.2	A
Base Current (pulse) *	$I_{B(Pulse)}$	-0.4	A
Total Power Dissipation *	P_T	2	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* $PW \leq 10\text{ ms}$, Duty Cycle $\leq 50\%$

2SB1571

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cut-off Current	IcBO	V _{CB} = -50 V, I _E = 0			-100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} = -6.0 V, I _C = 0			-100	nA
DC Current Gain *	h _{FE1}	V _{CE} = -1.0 V, I _C = -1.0 A	80			
	h _{FE2}	V _{CE} = -1.0 V, I _C = -2.0 A	100	200	400	
Base to Emitter Voltage *	V _{BE}	V _{CE} = -1.0 V, I _C = -0.1 A	-0.6	-0.665	-0.7	V
Collector Saturation Voltage *	V _{CE(sat)1}	I _C = -3.0 A, I _B = -0.15 A		-0.17	-0.35	V
Collector Saturation Voltage *	V _{CE(sat)2}	I _C = -5.0 A, I _B = -0.25 A		-0.28	-0.55	V
Base Saturation Voltage *	V _{BE(sat)}	I _C = -3.0 A, I _B = -0.15 A		-0.89	-1.2	V
Gain Bandwidth Product	f _T	V _{CE} = -10 V, I _E = 0.5 A		150		MHz
Output Capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1.0 MHz		100		pF
Turn-on Time	t _{on}	I _C = -2.0 A, V _{CC} = -10 V, R _L = 5.0Ω, I _{B1} = -I _{B2} = -0.1 A,		265		ns
Storage Time	t _{stg}			350		ns
Fall Time	t _f			50		ns

* Pulsed: PW ≤ 350 μs, Duty Cycle ≤ 2%.

■ hFE Classification

Marking	HX	HY	HZ
hFE	100~200	160~320	200~400