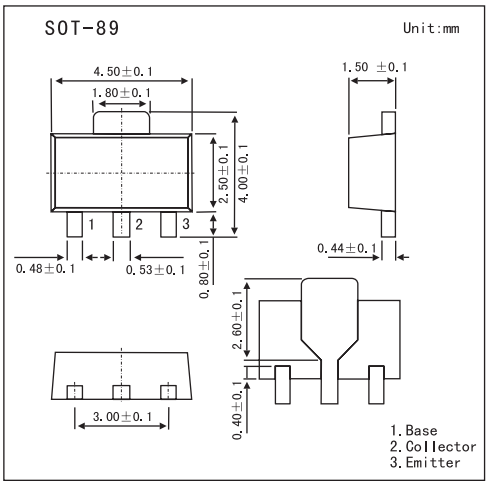
NPN Silicon Epitaxia

2SC3736



■ Features

- High speed,high voltage switching.
- Low collector saturation voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	45	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Collector current (Pulse)*	I_{CP}	2	A
Total power dissipation	P_T	2	W
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤10ms,duty cycle≤50%.

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 45V, I_E=0			0.5	nA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V, I_C=0			0.5	nA
DC current gain *	h_{FE}	V_{CE} = 10V , I_C = 50mA	60		200	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = 500mA , I_B = 50mA		0.17	0.4	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C = 500mA , I_B = 50mA		0.9	1.2	V
Gain bandwidth product	f_T	V_{CE} = 10V , I_E = -100mA	300	380		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , I_E = 0, f = 1.0MHz		6.7	10	pF
Turn-on time	t_{on}	I_C = 500mA , I_{B1} = I_{B2} = 50mA		20	40	ns
Storage time	t_{stg}			55	80	ns
Turn-off time	t_{off}			72	100	ns

*. PW≤350μs,duty cycle≤2%

■ hFE Classification

Marking	OL	OK
hFE	60～120	100～200