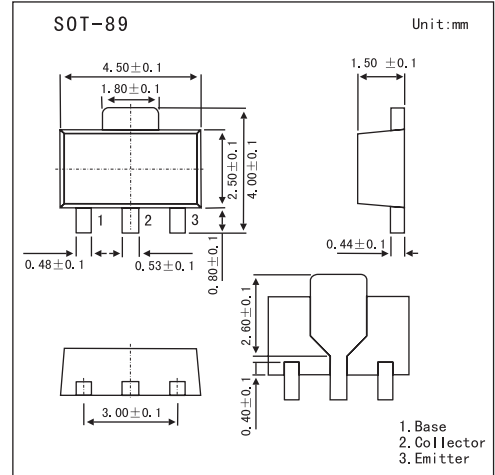


2SC3736

Features

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



Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	80	V
Collector-emitter voltage	V _{CEO}	45	V
Emitter-base voltage	V _{EB0}	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	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10ms, duty cycle ≤ 50%.

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cutoff current	I _{CBO}	V _{CB} = 45V, I _E = 0			0.5	nA
Emitter cutoff current	I _{EB0}	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