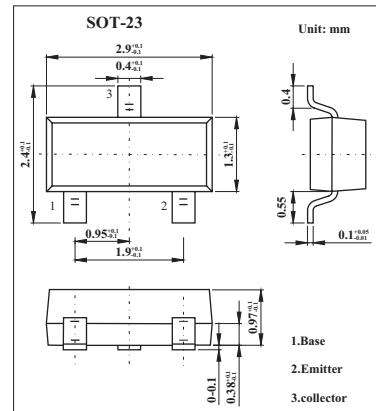


## 2SC3734

### ■ Features

- High speed :  $t_{stg} < 200\text{ns}$ .



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	60	V
Collector-emitter voltage	V <sub>C EO</sub>	40	V
Emitter-base voltage	V <sub>EBO</sub>	6	V
Collector current	I <sub>C</sub>	200	mA
Total power dissipation at 25°C ambient temperature	P <sub>T</sub>	200	mW
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CB0</sub>	V <sub>CB</sub> = 30V, I <sub>E</sub> =0			100	nA
Emitter cutoff current	I <sub>EB0</sub>	V <sub>EB</sub> = 3V, I <sub>C</sub> =0			100	nA
DC current gain *	h <sub>FE</sub>	V <sub>CE</sub> = 1V , I <sub>C</sub> = 10mA	75	200	300	
Collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> = 50mA , I <sub>B</sub> = 5mA		0.12	0.3	V
Base-emitter saturation voltage *	V <sub>BE(sat)</sub>	I <sub>C</sub> = 50mA , I <sub>B</sub> = 5mA		0.8	0.95	V
Gain bandwidth product	f <sub>r</sub>	V <sub>CE</sub> = 20V , I <sub>E</sub> = -10mA	300	510		MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 5V , I <sub>E</sub> = 0 , f = 1.0MHz		3.0	4.0	pF
Turn-on time	t <sub>on</sub>	V <sub>CC</sub> = 3V ,			70	ns
Storage time	t <sub>stg</sub>	I <sub>C</sub> = 10mA ,		100	200	ns
Turn-off time	t <sub>off</sub>	I <sub>B1</sub> = -I <sub>B2</sub> = 1mA			250	ns

\*. PW≤350μs,duty cycle≤2%

### ■ hFE Classification

Marking	B22	B23	B24
hFE	75~150	100~200	150~300