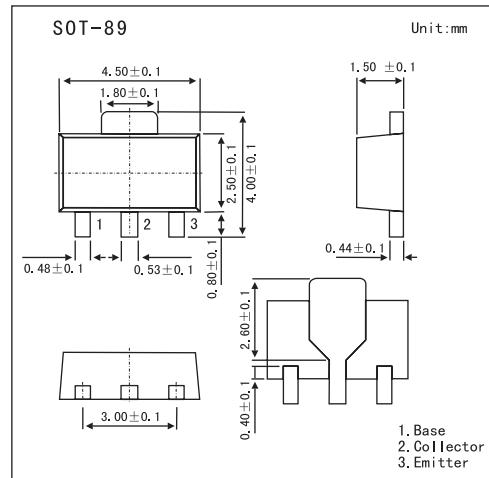


## NPN Silicon Epitaxia

## 2SC3617



## ■ Features

- World standard miniature package.
- High hFE hFE=800 to 1600.

## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CBO</sub>	50	V
Collector-emitter voltage	V <sub>CEO</sub>	50	V
Emitter-base voltage	V <sub>EBO</sub>	15	V
Collector current	I <sub>C</sub>	300	mA
Collector current (Pulse)*	I <sub>CP</sub>	500	mA
Total power dissipation	P <sub>T</sub>	2.0	W
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW≤10ms,duty cycle≤50%.

## ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = 50V, I <sub>E</sub> =0			100	nA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = 10V, I <sub>C</sub> =0			100	nA
DC current gain *	h <sub>FE</sub>	V <sub>CE</sub> = 5.0V , I <sub>C</sub> = 100mA	800		3200	
		V <sub>CE</sub> = 5.0V , I <sub>C</sub> = 300mA	640			
Collector-emitter saturation voltage *	V <sub>CE(sat)</sub>	I <sub>C</sub> = 100mA , I <sub>B</sub> = 1.0mA		0.12	0.13	V
Base-emitter saturation voltage *	V <sub>BE(sat)</sub>	I <sub>C</sub> = 100mA , I <sub>B</sub> = 1.0mA		0.7	1.2	V
Gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> = 5.0V , I <sub>E</sub> = -50mA	150	220		MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V , I <sub>E</sub> = 0, f = 1.0MHz		8.0		pF

\*. PW≤350μs,duty cycle≤2%

## ■ hFE Classification

Marking	TM	TL	TK
hFE	800~1600	1200~2400	2000~3200