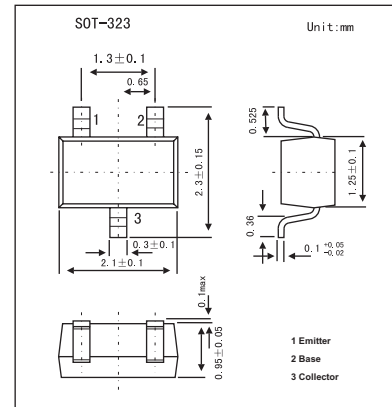


## PNP Silicon Epitaxia

## 2SA1611

## ■ Features

- High DC Current Gain.
- High Voltage.



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	-60	V
Collector-emitter voltage	V <sub>CEO</sub>	-50	V
Emitter-base voltage	V <sub>EB0</sub>	-5	V
Collector current	I <sub>C</sub>	-100	mA
Total power dissipation	P <sub>T</sub>	150	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	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I <sub>CBO</sub>	V <sub>CB</sub> = -60V, I <sub>E</sub> =0			-0.1	μA
Emitter cutoff current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> =0			-0.1	μA
DC current gain *	h <sub>FE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = -1mA	90	200	600	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -100mA, I <sub>B</sub> = -10mA		-0.18	-0.3	V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = -6V, I <sub>C</sub> = 1mA	-0.58	-0.62	-0.68	V
Gain bandwidth product	f <sub>T</sub>	V <sub>CE</sub> = -6V, I <sub>E</sub> = 10mA		180		MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1.0MHz		4.5		pF

\* Pulse test: t<sub>p</sub> ≤ 300 μs; d ≤ 0.02.

■ h<sub>FE</sub> Classification

Marking	M4	M5	M6	M7
h <sub>FE</sub>	90~180	135~270	200~400	300~600