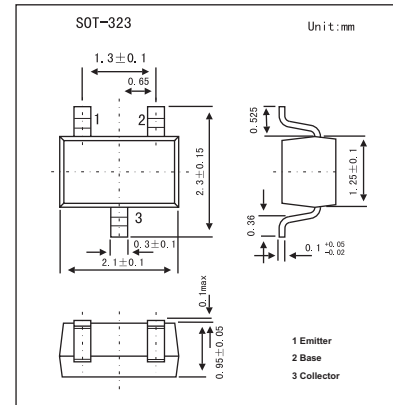


## Silicon NPN Epitaxial Planar

## 2SC3929

## ■ Features

- Low noise voltage NV.
- High forward current transfer ratio hFE.



## ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V <sub>CB0</sub>	35	V
Collector-emitter voltage	V <sub>CEO</sub>	35	V
Emitter-base voltage	V <sub>EB0</sub>	5	V
Collector current	I <sub>C</sub>	50	mA
Peak collector current	I <sub>CP</sub>	100	mA
Collector power dissipation	P <sub>C</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-base voltage	V <sub>CB0</sub>	I <sub>C</sub> = 10 μA, I <sub>E</sub> = 0	35			V
Collector-emitter voltage	V <sub>CEO</sub>	I <sub>C</sub> = 2 mA, I <sub>B</sub> = 0	35			V
Emitter-base voltage	V <sub>EB0</sub>	I <sub>E</sub> = 10 μA, I <sub>C</sub> = 0	5			V
Base-emitter voltage	V <sub>BE</sub>	V <sub>CE</sub> = 1 V, I <sub>C</sub> = 100 mA		0.7	1.0	V
Collector-base cutoff current	I <sub>CB0</sub>	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0			0.1	μA
Collector-emitter cutoff current	I <sub>CEO</sub>	V <sub>CE</sub> = 10 V, I <sub>B</sub> = 0			1	μA
Forward current transfer ratio	h <sub>FE</sub>	V <sub>CE</sub> = 5 V, I <sub>C</sub> = 2 mA	180		700	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 100 mA, I <sub>B</sub> = 10 mA			0.6	V
Transition frequency	f <sub>T</sub>	V <sub>CB</sub> = 5 V, I <sub>E</sub> = 2 mA, f = 200 MHz		100		MHz
Noise voltage	NV	V <sub>CE</sub> = 10 V, I <sub>C</sub> = 1 mA, G <sub>v</sub> = 80 dB, R <sub>g</sub> = 100 kΩ, F <sub>function</sub> = FLAT			150	mV

## ■ hFE Classification

Marking	SR	SS	ST
hFE	180~360	260~520	360~700