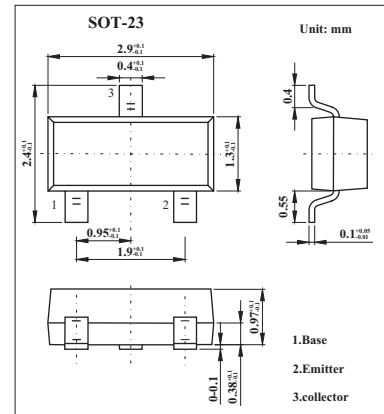


## Silicon NPN Epitaxial

## 2SC2619

## ■ Features

- High frequency amplifier.

■ Absolute Maximum Ratings  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	30	V
Collector-emitter voltage	$V_{CEO}$	30	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_C$	100	mA
Collector dissipation	$P_C$	150	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$ 

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}$ , $I_E = 0$	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}$ , $R_{BE} = \infty$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}$ , $I_C = 0$	5			V
Collector cutoff current	$I_{CBO}$	$V_{CB} = 20\text{V}$ , $I_E = 0$			0.5	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 2\text{V}$ , $I_C = 0$			0.5	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE} = 12\text{V}$ , $I_C = 2\text{mA}$	60		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}$ , $I_B = 1\text{mA}$			1.1	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 12\text{V}$ , $I_C = 2\text{mA}$			0.75	V
Gain bandwidth product	$f_T$	$V_{CE} = 12\text{V}$ , $I_C = 2\text{mA}$		230		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$			3.5	pF
Noise figure	NF	$V_{CE} = 6\text{V}$ , $I_C = 2\text{mA}$ , $f = 1\text{MHz}$ , $R_g = 500\Omega$		5		dB

■  $h_{FE}$  Classification

Marking	FB	FC
$h_{FE}$	60~120	100~200