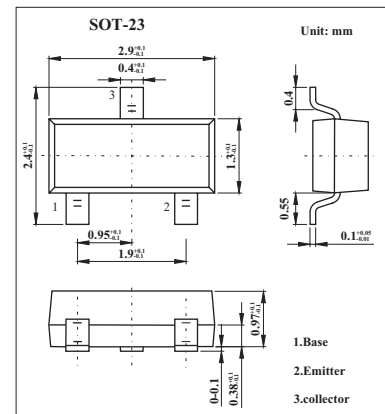


Silicon NPN Epitaxial

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_{CE0}	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	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = 2\text{V}$, $I_C = 0$			0.5	μA
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