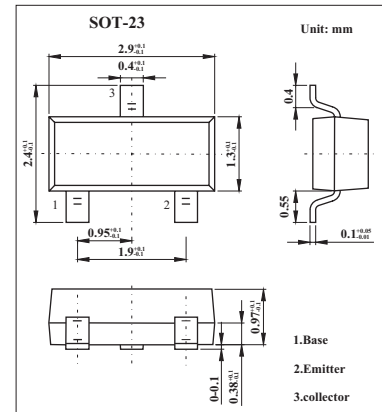


## Silicon NPN Epitaxial Planar Type

## 2SC2295



### ■ Features

- Optimum for RF amplification of FM/AM radios.
- High transition frequency  $f_T$ .
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	30	V
Collector-emitter voltage	$V_{CE0}$	20	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_C$	30	mA
Collector power dissipation	$P_C$	200	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 cutoff current	$I_{CBO}$	$V_{CB} = 10\text{ V}, I_E = 0$			0.1	$\mu\text{A}$
Forward current transfer ratio	$h_{FE}$	$V_{CB} = 10\text{ V}, I_C = -1\text{ mA}$	70		220	
Transition frequency	$f_T$	$V_{CB} = 10\text{ V}, I_E = -1\text{ mA}, f = 200\text{ MHz}$	100	250		MHz
Noise figure	NF	$V_{CB} = 10\text{ V}, I_E = -1\text{ mA}, f = 5\text{ MHz}$		2.8	4.0	dB
Reverse transfer impedance	$Z_{rb}$	$V_{CB} = 10\text{ V}, I_E = -1\text{ mA}, f = 2\text{ MHz}$		22	50	$\Omega$
Reverse transfer capacitance	$C_{re}$	$V_{CB} = 10\text{ V}, I_C = -1\text{ mA}, f = 10.7\text{ MHz}$		0.9	1.5	pF

### ■ $h_{FE}$ Classification

Marking	VB	VC
$h_{FE}$	70~140	110~220