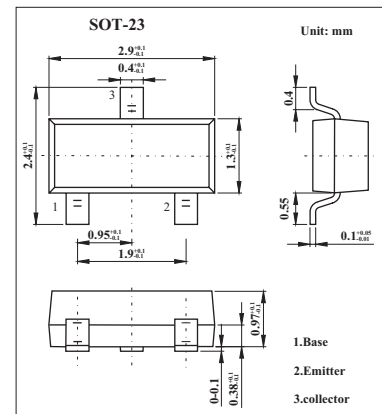


## Silicon NPN Epitaxial

## 2SC3325

## ■ Features

- Excellent hFE linearity :  $h_{FE}(2) = 25$  (min) ( $V_{CE} = 6\text{ V}$ ,  $I_C = 400\text{ mA}$ ).
- High voltage:  $V_{CEO} = 50\text{ V}$  (min).
- Small package.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CBO}$	50	V
Collector-emitter voltage	$V_{CEO}$	50	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	500	mA
Base current	$I_B$	50	mA
Collector power dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 50\text{ V}$ , $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5\text{ V}$ , $I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}(1)$	$V_{CE} = 1\text{ V}$ , $I_C = 100\text{ mA}$	70		240	
	$h_{FE}(2)^*$	$V_{CE} = 6\text{ V}$ , $I_C = 400\text{ mA}$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}$ , $I_B = 10\text{ mA}$		0.1	0.25	V
Base-emitter voltage	$V_{BE}$	$V_{CE} = 1\text{ V}$ , $I_C = 100\text{ mA}$		0.8	1	V
Transition frequency	$f_T$	$V_{CE} = 6\text{ V}$ , $I_C = 20\text{ mA}$		300		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 6\text{ V}$ , $I_E = 0$ , $f = 1\text{ MHz}$		7		pF

\* classification O: 25 (min), Y: 40 (min).

## ■ hFE Classification

Marking	CE	
	O	Y
hFE	70~140	120~240