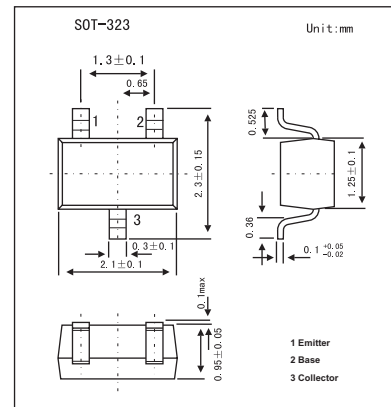


## Silicon NPN Epitaxial

## 2SC4667

## ■ Features

- High transition frequency:  $f_T = 400$  MHz (typ.)
- Low saturation voltage:  $V_{CE(sat)} = 0.3$  V (max)
- High speed switching time:  $t_{stg} = 15$  ns (typ.)

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	40	V
Collector-emitter voltage	$V_{CEO}$	15	V
Emitter-base voltage	$V_{EBO}$	5	V
Collector current	$I_C$	200	mA
Base current	$I_B$	40	mA
Collector power dissipation	$P_C$	100	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cut-off current	$I_{CBO}$	$V_{CB} = 40$ V, $I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 5$ V, $I_C = 0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE} = 1$ V, $I_C = 10$ mA	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 20$ mA, $I_B = 1$ mA			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 20$ mA, $I_B = 1$ mA			1.0	V
Transition frequency	$f_T$	$V_{CE} = 10$ V, $I_C = 10$ mA	200	400		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10$ V, $I_E = 0$ , $f = 1$ MHz		4	6	pF
Turn-on time	$t_{on}$		70		ns	
Storage time	$t_{stg}$		15		ns	
Fall time	$t_f$		30		ns	

■  $h_{FE}$  Classification

Marking	CH		
Rank	R	O	Y
$h_{FE}$	40~80	70~140	120~240