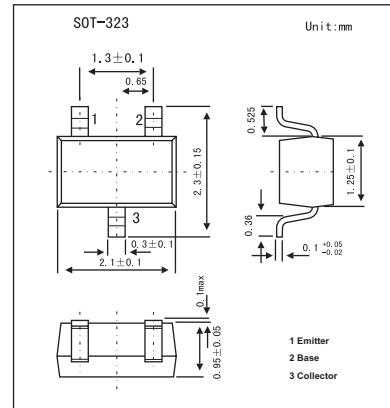


## Silicon NPN Epitaxial

## 2SC4666

## ■ Features

- High  $h_{FE}$ :  $h_{FE} = 600 \sim 3600$
- High voltage:  $V_{CEO} = 50\text{ V}$
- High collector current:  $I_C = 150\text{ mA (max)}$
- 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	$I_C$	150	mA
Base current	$I_B$	30	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	$I_{CBO}$	$V_{CB} = 50\text{ V}, I_E = 0$			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	$h_{FE}$	$V_{CE} = 6\text{ V}, I_C = 2\text{ mA}$	600		3600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}, I_B = 10\text{ mA}$		0.12	0.25	V
Transition frequency	$f_T$	$V_{CE} = 10\text{ V}, I_C = 10\text{ mA}$	100	250		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = 10\text{ V}, I_E = 0, f = 1\text{ MHz}$		3.5		pF
Noise figure	NF(1)	$V_{CE} = 6\text{ V}, I_C = 0.1\text{ mA}, f = 100\text{ Hz}, R_g = 10\text{ k}\Omega$		0.5		dB
	NF(2)	$V_{CE} = 6\text{ V}, I_C = 0.1\text{ mA}, f = 1\text{ kHz}, R_g = 10\text{ k}\Omega$		0.3		dB

■  $h_{FE}$  Classification

Marking	P	
	A	B
$h_{FE}$	600~1800	1200~3600