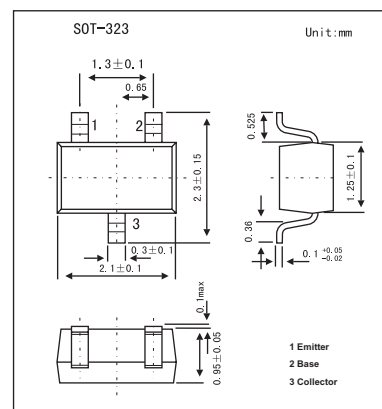


Silicon NPN Epitaxial

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	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}, I_C = 0$			0.1	μA
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	
Rank	A	B
h_{FE}	600~1800	1200~3600