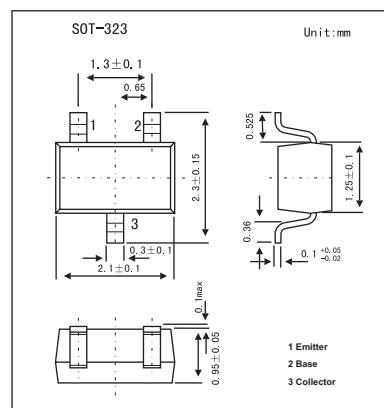


Silicon NPN Epitaxial

2SC4155A

■ Features

- Small collector to emitter saturation voltage.
 $V_{CE(sat)}=0.3\text{max}$
- Excellent linearity of dc forward current gain.
- Supper mini package for easy mounting.



■ 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}	6	V
Collector current	I_C	200	mA
Collector power dissipation	P_C	150	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	Testconditons	Min	Typ	Max	Unit
Collector-emitter break down voltage	$V_{(BR)CEO}$	$I_C=100\mu\text{A}, R_{BE}=\infty$	50			V
Collector cut-off current	I_{CBO}	$V_{CB} = 50 \text{ V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4 \text{ V}, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6 \text{ V}, I_C = 1 \text{ mA}$	120	820		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$			0.3	V
Transition frequency	f_T	$V_{CE} = 6 \text{ V}, I_C = -10 \text{ mA}$		200		MHz
Collector output capacitance	C_{ob}	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		4		pF
Noise figure	NF	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}, R_g=2k\Omega$			15	dB

■ hFE Classification

Marking	HQ	HR	HS	HT
hFE	120~270	180~390	270~560	390~820