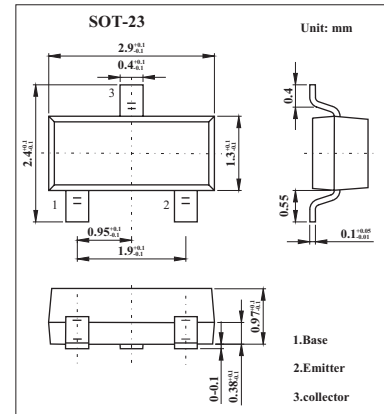


## NPN Silicon Epitaxial Transistor

## 2SC1622A

## ■ Features

- High DC current gain.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	120	V
Collector-emitter voltage	$V_{CE0}$	120	V
Emitter-base voltage	$V_{EB0}$	5	V
Collector current	$I_c$	50	mA
Total power dissipation	$P_T$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 120\text{V}, I_E = 0$			0.05	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$			0.05	$\mu\text{A}$
DC current gain *	$h_{FE}$	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$	135	500	900	
		$V_{CE} = 6\text{V}, I_C = 0.1\text{mA}$	100			
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 1\text{mA}$		0.07	0.30	V
Base-emitter voltage *	$V_{BE}$	$V_{CE} = 6\text{V}, I_C = 1\text{mA}$	0.55	0.58	0.65	V
Gain bandwidth product	$f_T$	$V_{CE} = 6\text{V}, I_E = -1\text{mA}$	50	110		MHz
Output capacitance	$C_{ob}$	$V_{CB} = 30\text{V}, I_E = 0, f = 1.0\text{MHz}$		1.6	2.5	pF

\* Pulse test:  $t_p \leq 350 \mu\text{s}; d \leq 0.02$ .

■  $h_{FE}$  Classification

Marking	D15	D16	D17	D18
$h_{FE}$	135~270	200~400	300~600	450~900