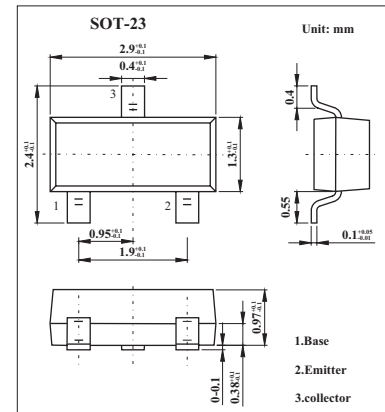


## Silicon NPN Epitaxial

## 2SC3121

## ■ Features

- High Transition Frequency : $f_T=1500\text{MHz}$  (Typ.)
- Excellent Linearity

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	$V_{CB0}$	30	V
Collector-emitter voltage	$V_{CEO}$	15	V
Emitter-base voltage	$V_{EBO}$	3	V
Collector current	$I_C$	25	mA
Base current	$I_B$	50	mA
Collector Power Dissipation	$P_C$	150	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature Range	$T_{stg}$	-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	$I_{CBO}$	$V_{CB} = 15\text{V}, I_E = 0$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 3\text{V}, I_C = 0$			1.0	$\mu\text{A}$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, I_B = 0$	15			V
DC current gain	$h_{FE}$	$V_{CE} = 3\text{V}, I_C = 8\text{mA}$	60	150	320	
Transition Frequency	$f_T$	$V_{CE} = 10\text{V}, I_C = 8\text{mA}$	1100	1500		MHz
Conversion Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}, I_E = 0\text{mA}, f = 1\text{MHz}$		0.9	1.3	pF
Collector-Base Time Constant	$C_{c.rbb2}$	$V_{CB} = 10\text{V}, I_C = 8\text{mA}, f = 30\text{MHz}$		7	12	ps

## ■ Marking

Marking	HC
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