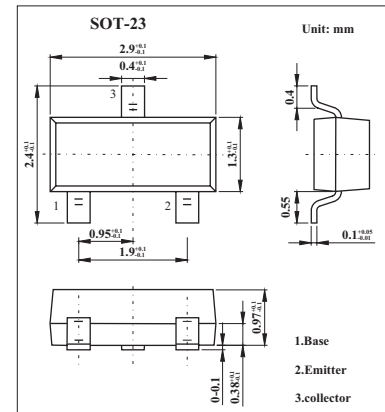


Silicon NPN Epitaxial

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	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 3\text{V}, I_C = 0$			1.0	μA
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	$C_{c,rb2}$	$V_{CB} = 10\text{V}, I_C = 8\text{mA}, f = 30\text{MHz}$		7	12	ps

■ Marking

Marking	HC
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