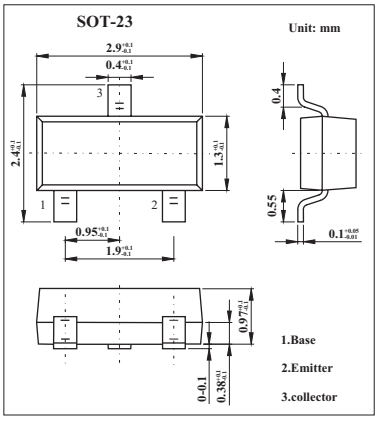
PNP Silicon Epitaxial Transistor

2SA1330



■ Features

- High DC current gain.
- High voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-200	V
Collector-emitter voltage	V_{CEO}	-200	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Total power dissipation	P_T	200	mW
Junction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -200V, I_E=0			-100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = -5V, I_C=0			-100	nA
DC current gain *	h_{FE}	V_{CE} = -10V , I_C = -10mA	90	200	450	
		V_{CE} = -10V , I_C = -50mA	50	195		
Base-emitter voltage *	V_{BE}	V_{CE} = -10V , I_C = -10mA	-0.6	-0.65	-0.7	V
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = -50mA , I_B = -5mA		-0.21	-0.3	V
Base saturation voltage *	$V_{BE(sat)}$	I_C = -50mA , I_B = -5mA		-0.8	-1.2	V
Gain bandwidth product	f_T	V_{CE} = -10V , I_E = 10mA		120		MHz
Output capacitance	C_{ob}	V_{CB} = -30V , I_E = 0 , f = 1.0MHz		3.6		pF
Turn-on time	t_{on}	I_C = -10mA, I_{B1} = -I_{B2} = -1mA,		0.16		μs
Storage time	t_{stg}	V_{CC} = -10 V		1.3		μs
Fall time	t_f	$V_{BE(off)}$ = 2.5V		0.18		μs

* Pulse test: tp ⩽ 350 μs; d ⩽ 0.02.

■ h_{FE} Classification

Marking	O5	O6	O7
hFE	90～180	135～270	200～450