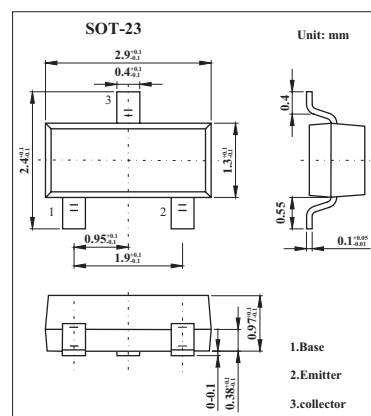


PNP Silicon Epitaxia

2SA1464

■ Features

- High f_T : $f_T=400\text{MHz}$.

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	-60	V
Collector-emitter voltage	V_{CE0}	-40	V
Emitter-base voltage	V_{EB0}	-5	V
Collector current	I_C	-500	mA
Maximum Total power dissipation at 25°C ambient temperature	P_T	200	mW
Maximum Junction temperature	T_j	150	$^\circ\text{C}$
Maximum Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -40\text{V}$, $I_E = 0$			-100	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4\text{V}$, $I_C = 0$			-100	nA
DC current gain *	h_{FE}	$V_{CE} = -2\text{V}$, $I_C = -150\text{mA}$	75	140	300	
		$V_{CE} = -2\text{V}$, $I_C = -500\text{mA}$	20	50		
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.45	-0.75	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-1	-1.3	V
Gain bandwidth product	f_T	$V_{CE} = -10\text{V}$, $I_E = 20\text{mA}$	150	400		MHz
Output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0$, $f = 1.0\text{MHz}$		5	8	pF
Turn-on time	t_{on}	$V_{CC} = -30\text{V}$, $I_C = 150\text{mA}$, $I_{B1} = -I_{B2} = 15\text{mA}$			35	ns
Storage time	t_{stg}				225	ns
Turn-off time	t_{off}				255	ns

*. $PW \leq 350\mu\text{s}$, duty cycle $\leq 2\%$

■ h_{FE} Classification

Marking	Y12	Y13	Y14
h_{FE}	75~150	100~200	150~300