

PNP Silicon Epitaxia

2SA1463

■ Features

- High speed,high voltage switching.
- Low Collector Saturation Voltage

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CB0}	-60	V
Collecto to emitter voltage	V_{CEO}	-45	V
Emitter to base voltage	V_{EBO}	-5.0	V
Collector current(DC)	I_C	-1.0	A
Collector current(Pulse)*	I_C	-2.0	A
Total power dissipation	P_T	20	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

*.pw $\leq$ 10 ms,Duty Cycle $\leq$ 50%

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

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CES}	$V_{CE} = -45\text{V}, R_{BE}=0$			-0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4\text{V}, I_C=0$			-0.5	μA
DC current gain *	h_{FE1}	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$	60		200	
	h_{FE2}	$V_{CE} = -10\text{V}, I_C = -500\text{mA}$	60			
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$		-0.26	-0.6	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$		-0.98	-1.2	V
Gain bandwidth product	f_T	$V_{CE} = -10\text{V}, I_E = 100\text{mA}$	300	400		MHz
Output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1.0\text{MHz}$		11	25	pF
Turn-on time	t_{on}	$I_C = -500\text{mA}, I_{B1} = I_{B1} = -50\text{mA}$		25	40	ns
Storage time	t_{stg}			46	70	ns
Turn-off time	t_{off}			62	100	ns

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

■ hFE Classification

Marking	1L	1K
hFE	60~120	100~200

