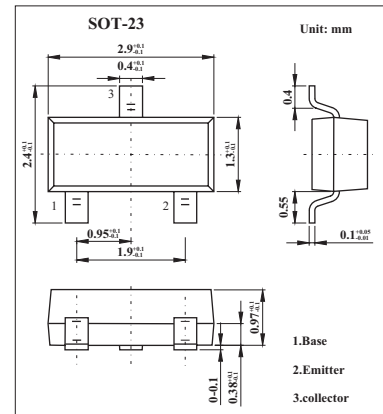


## PNP Silicon Epitaxia Transistor

## 2SA1462

## ■ Features

- High speed,high voltage switching.
- High  $f_t$ : $f_t=1800\text{MHz}$  TYP.
- Low  $C_{ob}$ : $C_{ob}=2.0\text{pF}$  TYP.

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

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	-15	V
Collecto to emitter voltage	$V_{CEO}$	-15	V
Emitter to base voltage	$V_{EBO}$	-4.5	V
Collector current	$I_c$	-50	mA
Total power dissipation $T_A=25^\circ\text{C}$	$P_T$	200	mW
Junction temperature	$T_j$	150	$^\circ\text{C}$
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	$I_{CES}$	$V_{CE} = -8.0\text{V}$ , $R_{BE}=0$			-100	nA
Emitter cutoff current	$I_{EBO}$	$V_{EB} = -3.0\text{V}$ , $I_c=0$			-100	nA
DC current gain *	$h_{FE}$	$V_{CE} = -1.0\text{V}$ , $I_c = -10\text{mA}$	50	80	150	
		$V_{CE} = -1.0\text{V}$ , $I_c = -1\text{mA}$	30	70		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -10\text{mA}$ , $I_B = -1.0\text{mA}$		-0.09	-0.20	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c = -10\text{mA}$ , $I_B = -1.0\text{mA}$		-0.98	-0.95	V
Gain bandwidth product	$f_T$	$V_{CE} = -10\text{V}$ , $I_E = 10\text{mA}$	800	1800		MHz
Output capacitance	$C_{ob}$	$V_{CB} = -5.0\text{V}$ , $I_E = 0$ , $f = 1.0\text{MHz}$		2.0	3.0	pF
Turnput Capacitance	$t_{on}$	$I_c = -10\text{mA}$ , $I_{B1} = I_{B1} = -1.0\text{mA}$		9.0	20	ns
Storage Time	$t_{stg}$			16	40	ns
Turn-off Time	$t_{off}$			19	40	ns

\* Pulse test:  $t_p \leq 350 \mu\text{s}$ ; Duty Cycle  $\leq 2\%$

■  $h_{FE}$  Classification

Marking	Y33	Y34
$h_{FE}$	50~100	75~150