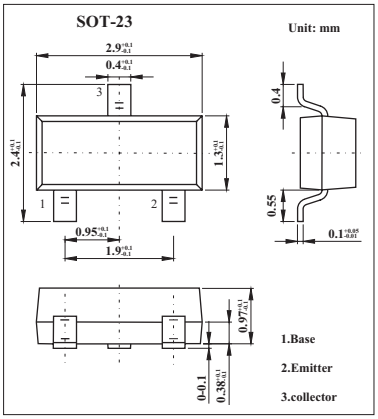
PNP Silicon Epitaxial Transistor

2SA1461



■ Features

- High speed switching: t_{stg}=110ns.
- High gain bandwidth product: f_T=510MHz.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-40	V
Collector-emitter voltage	V_{CEO}	-40	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-200	mA
Maximum Total power dissipation at 25℃ ambient temperature	P_T	200	mW
Maximum Junction temperature	T_j	150	℃
Maximum Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -30V, I_E=0			-100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = -3V, I_C=0			-100	nA
DC current gain *	h_{FE}	V_{CE} = -1V , I_C = -10mA	75	180	300	
		V_{CE} = -1V , I_C = -100mA	25	100		
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = -50mA , I_B = -5mA		-0.1	-0.4	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	I_C = -50mA , I_B = -5mA		-0.8	-0.95	V
Gain bandwidth product	f_T	V_{CE} = -20V , I_E = 10mA	200	510		MHz
Output capacitance	C_{ob}	V_{CB} = -5V , I_E = 0 , f = 1.0MHz		2.5	4.5	pF
Turn-on time	t_{on}	V_{CC} = -3V ,			70	ns
Storage time	t_{stg}	I_C = -10mA ,		110	225	ns
Turn-off time	t_{off}	I_{B1} = -I_{B2} = -1mA			300	ns

*. PW≤350μs,duty cycle≤2%

■ h_{FE} Classification

Marking	Y22	Y23	Y24
hFE	75～150	100～200	150～300