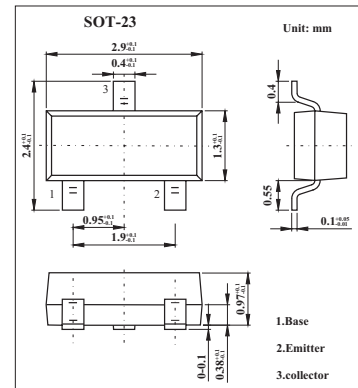


PNP Silicon Epitaxial Transistor

2SB736A

■ Features

- Micro package.
- Complementary to 2SD780A.
- High DC Current Gain: $h_{FE} = 200$ TYP. ($V_{CE} = -1.0$ V, $I_C = -50$ mA)



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

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-80	V
Collector to emitter voltage	V_{CEO}	-80	V
Emitter to base voltage	V_{EBO}	-5.0	V
Collector current (DC)	I_C	-300	mA
Total power dissipation	P_T	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	$V_{CB} = -5.0$ V, $I_E = 0$			-100	nA
Emitter cutoff current	I_{EBO}	$V_{EB} = -5.0$ V, $I_C = 0$			-100	nA
DC current gain *	h_{FE}	$V_{CE} = -1.0$ V, $I_C = -50$ mA	110		400	
Base to emitter voltage *	V_{BE}	$V_{CE} = 6.0$ V, $I_C = -10$ mA	-600	-660	-700	mV
Collector saturation voltage *	$V_{CE(sat)}$	$I_C = -300$ mA, $I_B = -30$ mA		-0.35	-0.6	V
Output capacitance	C_{ob}	$V_{CB} = -6.0$ V, $I_E = 0$, $f = 1.0$ MHz		13		pF
Gain bandwidth product	f_r	$V_{CE} = -6.0$ V, $I_E = 10$ mA		100		MHz

* Pulsed: $PW \leq 350$ μs , duty cycle $\leq 2\%$

■ h_{FE} Classification

Marking	B51	B52	B53	B54	B55
h_{FE}	110~180	135~220	170~270	200~320	250~400