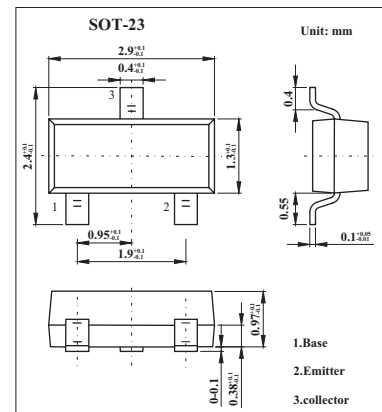


PNP Silicon Epitaxial Transistor

2SA812

■ Features

- High DC Current Gain: $h_{FE} = 200$ Typ. ($V_{CE} = -6.0V$, $I_C = -1.0mA$)
- High Voltage: $V_{CEO} = -50V$
- Complementary to 2SC1623

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

Parameter	Symbol	Rating	Unit
Collector-Emitter Voltage	V_{CEO}	-50	V
Collector-Base Voltage	V_{CBO}	-60	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current (DC)	I_C	-100	mA
Total Power Dissipation	P_T	200	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB} = -60V$, $I_E = 0$			-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5.0V$, $I_C = 0$			-0.1	μA
DC Current Gain *	h_{FE}	$I_C = -1.0mA$, $V_{CE} = -6.0V$	90	200	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100mA$, $I_B = -10mA$		-0.18	-0.3	V
Base to Emitter Voltage	V_{BE}	$V_{CE} = 6.0V$, $I_C = -1.0mA$	-0.58	-0.62	-0.68	V
Gain Bandwidth Product	f_T	$V_{CE} = -6.0V$, $I_E = 10mA$		180		MHz
Output Capacitance	C_{OB}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$		4.5		pF

* Pulsed: $PW \leq 350\mu s$, D.C. $\leq 2\%$.

■ h_{FE} Classification

Marking	M4	M5	M6	M7
h_{FE}	90 ~ 180	135 ~ 270	200 ~ 400	300 ~ 600