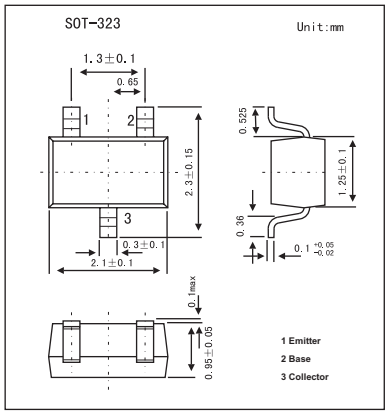
PNP Silicon Epitaxia

2SA1611



■ Features

- High DC Current Gain.
- High Voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-60	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-100	mA
Total power dissipation	P_T	150	mW
Junction temperature	T_j	150	℃
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} = -60V, I_E=0			-0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = -5V, I_C=0			-0.1	μA
DC current gain *	h_{FE}	V_{CE} = -6V , I_C = -1mA	90	200	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = -100mA , I_B = -10mA		-0.18	-0.3	V
Base-emitter voltage	V_{BE}	V_{CE} = -6V , I_C = 1mA	-0.58	-0.62	-0.68	V
Gain bandwidth product	f_T	V_{CE} = -6V , I_E = 10mA		180		MHz
Output capacitance	C_{ob}	V_{CB} = -10V , I_E = 0 , f = 1.0MHz		4.5		pF

* Pulse test: tp ⩽ 300 μs; d ⩽ 0.02.

■ h_{FE} Classification

Marking	M4	M5	M6	M7
hFE	90～180	135～270	200～400	300～600