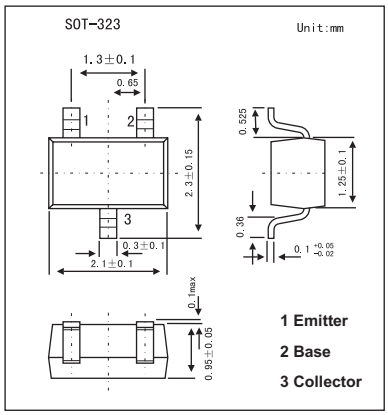
TY Semicondutor®

Product specification

2SA1612



■ Features

- High DC current gain

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	-120	V
Collector to emitter voltage	V_{CEO}	-120	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current (DC)	I_C	-50	mA
Total power dissipation	P_T	150	mW
Junction temperature	T_j	150	℃
Storage temperature range	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = -120V, I_E=0			-50	nA
Emitter cutoff current	I_{EBO}	V_{EB} = -5V, I_C=0			-50	nA
DC current gain	h_{FE}	V_{CE} = -6V , I_C = -1mA	135	500	900	
		V_{CE} = -6V , I_C = -0.1mA *	100	500		
Collector-emitter saturation voltage *	$V_{CE(sat)}$	I_C = -10mA , I_B = -1mA		-0.09	-0.3	V
Base-emitter voltage	V_{BE}	V_{CE} = -6V , I_C = -1mA	-0.55	-0.61	-0.65	V
Gain bandwidth product	f_T	V_{CE} = -6V , I_E = -1mA	50	90		MHz
Output capacitance	C_{ob}	V_{CB} = -30V , I_E = 0 , f = 1.0MHz		2	3	pF

*. PW≤350μs,duty cycle≤2%

■ h_{FE} Classification

Marking	C15	C16	C17	C18
h_{FE}	135～270	200～400	300～600	450～900