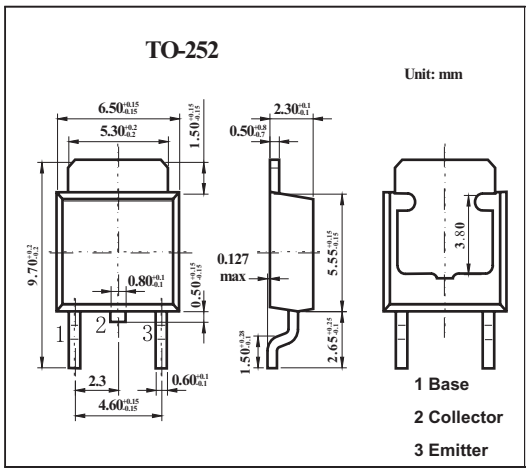
PNP Silicon Transistor

2SA1412-Z



Features

- High Voltage: V_{CEO}=-400V
- High speed:tr≤0.7μs

Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-400	V
Collector to Emitter Voltage	V_{CEO}	-400	V
Emitter to Base Voltage	V_{EBO}	-7	V
Collector Current (DC)	I_C	-2	A
Collector Current (Pulse) *1	I_C	-4	A
Total power Dissipation (Ta=25℃) *2	P_T	2	W
Junction Tmeperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 to 150	℃

*1 pw≤10ms,Duty Cycle≤50%

*2 When mounted on ceramic substrate of 7.5cm^{2}X0.7mm

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■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=-400V,I_E=0			-10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-5V,I_C=0			-10	μA
DC Current Gain*	h_{FE}	V_{CE}=-5V,I_C=-0.1A	40	60	120	
		V_{CE}=-5V,I_C=-1.0A	10	22		
Collector Saturation Voltage *	$V_{CE(sat)}$	I_C=-0.5A,I_B=-0.1A		-0.25	-0.5	V
Base Saturation Voltage *	$V_{BE(sat)}$	I_C=-0.5mA,I_B=-0.1mA		-0.85	-1.2	V
Gain Bandwidth Product	fT	VCE=-10V,IE=-100mA		40		MHz
Output Capacitance	C_{ob}	VCB=-10V,IE=0,f=1.0MHz		30		pF
Turn-on Time	t_{on}	I_C=-1A,R_L=150Ω		0.03	0.5	
Storage Time	t_{stg}	I_{B1}=-I_{B2}=-0.2A,V_{CC}=-150V		1.4	2	μs
Fall time	t_f			0.1	0.7	

* PW≤350μs,Duty Cycle≤2%

■ h_{FE} Classification

Marking	L	K
hFE	40 to 80	60 to 120