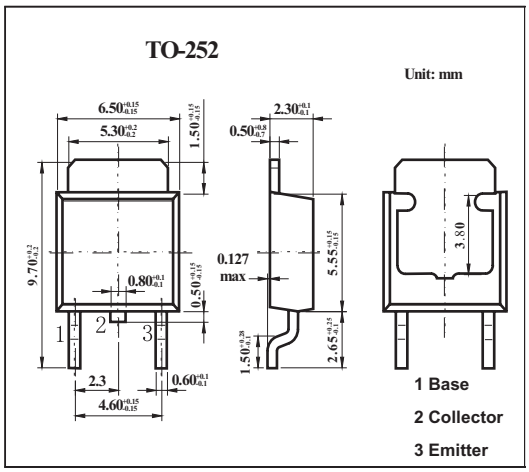
PNP Silicon Transistor

2SA1413-Z



■ Features

- High Voltage: V_{CEO}=-600V
- High speed:tr≤1.0μs

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-600	V
Collector to Emitter Voltage	V_{CEO}	-600	V
Emitter to Base Voltage	V_{EBO}	-7	V
Collector Current (DC)	I_C	-1	A
Collector Current (Pulse) *1	I_C	-2	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}=-600V,I_E=0			-10	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-7V,I_C=0			-10	μA
DC Current Gain*	h_{FE}	V_{CE}=-5V,I_C=-0.1A	30	58	120	
		V_{CE}=-5V,I_C=-0.5A	5	19		
Collector Saturation Voltage *	$V_{CE(sat)}$	I_C=-0.3A,I_B=-60mA		-0.28	-1	V
Base Saturation Voltage *	$V_{BE(sat)}$	I_C=-0.3A,I_B=-60mA		-0.85	-1.2	V
Gain Bandwidth Product	fT	V_{CE}=-10V,I_E=-50mA		28		MHz
Output Capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1.0MHz		42		pF
Turn-on Time	t_{on}	I_C=-0.5A,R_L=500Ω		0.1	0.5	
Storage Time	t_{stg}	I_{B1}=-I_{B2}=-0.1A,V_{CC}=-250V		3.5	5.0	μs
Fall time	t_f			0.08	0.5	

* PW≤350μs,Duty Cycle≤2%

■ h_{FE} Classification

Marking	M	L	K
hFE	30 to 60	40 to 80	60 to 120