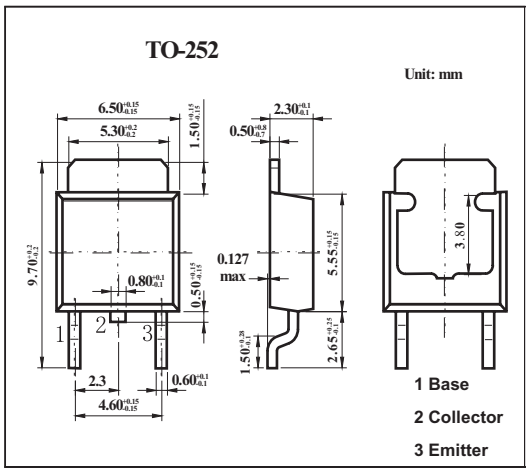
PNP Epitaxial Planar Silicon Transistor

2SA1772



■ Features

- High breadown voltage
- Large current capacity (I_C=1A)

■ 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}	-5	V
Collector Current (DC)	I_C	-1	A
Collector Current (Pulse)	I_C	-2	A
Collector Dissipation	P_C	1	W
Tc=25℃		15	W
Junction Tmeperature	T_j	150	℃
Storage Temperature	T_{stg}	-55 to 150	℃

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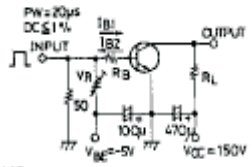
■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB}=-300V,I_E=0			-0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}=-4V,I_C=0			-0.1	μA
DC Current Gain*	h_{FE}	V_{CE}=-10V,I_C=-100mA	40		200	
Gain- Bandwidth Product	f_T	V_{CE}=-10V,I_C=-50mA		50		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	I_C=-200mA,I_B=-20mA			-1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	I_C=-200mA,I_B=-20mA			-1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	I_C=-10μA,I_E=0	-400			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	I_C=-1mA,R_{BE}=∞	-400			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	I_E=-10μA,I_C=0	-5			V
Output Capacitance	C_{ob}	V_{CB}=-30V,f=1MHz		12		pF
Turn-ON Time	t_{on}	 $10I_{B1} = -10I_{B2} = I_C = 200mA$ $R_L = 750\Omega$, $R_B = 50\Omega$, at $I_C = 200mA$ (For PNP, the polarity is reversed.) Unit (Resistance : Ω, Capacitance : F)		0.25		μs
Storage Time	tstg			3		
Fall Time	tf			0.3		

■ h_{FE} Classification

Rank	C	D	E
hFE	40 to 80	60 to 120	100 to 200