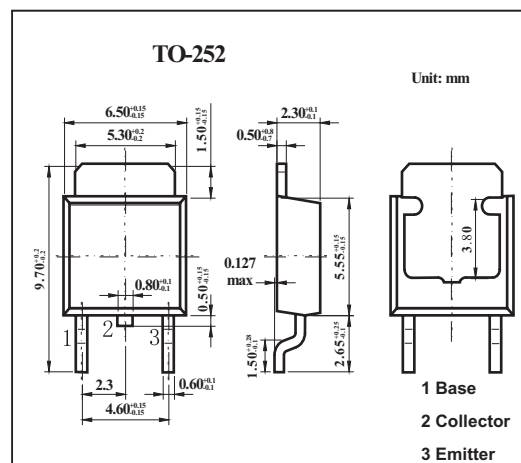


PNP Epitaxial Planar Silicon Transistor

2SA1773

■ Features

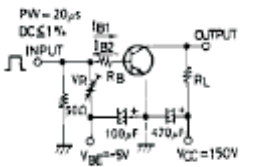
- High breakdown voltage
- Large current capacity ($I_c=2A$)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

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	-2	A
Collector Current (Pulse)	I_c	-4	A
Collector Dissipation $T_c=25^\circ\text{C}$	P_c	1	W
		15	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 150	$^\circ\text{C}$

2SA1773

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	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	$V_{CE}=-10V, I_C=-50mA$		40		MHz
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-50mA$			-1.0	V
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=-500mA, I_B=-50mA$			-1.0	V
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-400			V
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-1mA, R_{BE}=\infty$	-400			V
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5			V
Output Capacitance	C_{ob}	$V_{CB}=-30V, f=1MHz$		25		pF
Turn-ON Time	t_{on}	 $PW=20\mu s$ $DC \leq 1V$ $10I_{B1} = -10I_{B2} = I_C = 500mA$ $R_L = 300\Omega, R_B = 20\Omega, \text{ at } I_C = 500mA$ (For PNP, the polarity is reversed.)		0.12		μs
Storage Time	t_{stg}			3		
Fall Time	t_f			0.3		

■ hFE Classification

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