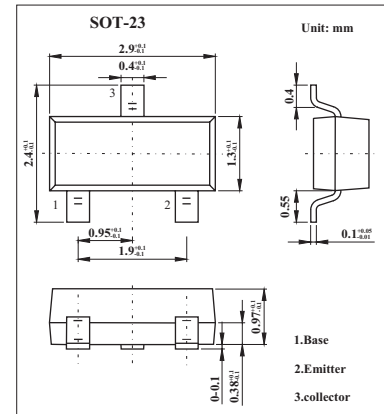


PNP Transistor

2SA1015

■ Features

- High voltage and high current
 $V_{CE0}=-50V(\text{min.}), I_C=-150mA(\text{max.})$
- Low noise: $NF=1dB(\text{Typ.})$ at $f=1KHz$



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

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	-50	V
Collector-Emitter Voltage	V_{CE0}	-50	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current -Continuous	I_C	150	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to 125	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CB0}	$I_C = -100 \mu A, I_E = 0$	-50			V
Collector-emitter breakdown voltage	V_{CE0}	$I_C = -0.1mA, I_B = 0$	-50			V
Emitter-base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CB0}	$V_{CB} = -50V, I_E = 0$			-0.1	μA
Collector cut-off current	I_{CE0}	$V_{CE} = -50V, I_B = 0$			-0.1	μA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5V, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -6V, I_C = -2mA$	130		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100 mA, I_B = -10mA$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -100 mA, I_B = -10mA$			-1.1	V
Transition frequency	f_T	$V_{CE} = -10V, I_C = -1mA, f = 30MHz$	80			MHz

■ h_{FE} Classification

Marking	BA	
	L	H
h_{FE}	130~200	200~400