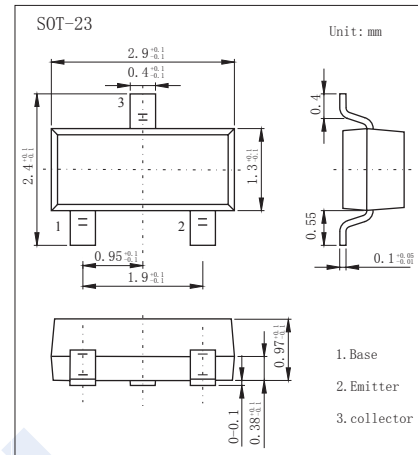


PNP Transistors

2SA1313

■ Features

- High voltage: $V_{CE0} = -50$ V (min)
- Small package
- Complementary to 2SC3325



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-50	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	I_C	-500	mA
Base current	I_B	-50	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100\mu\text{A}, I_E = 0$	-50			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1\text{ mA}, I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100\mu\text{A}, I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -50\text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{ mA}, I_B = -10\text{ mA}$			-0.25	V
Base-emitter saturation voltage	$V_{CB(sat)}$	$I_C = -100\text{ mA}, I_B = -10\text{ mA}$			-1.2	
Base - emitter voltage	V_{BE}	$V_{CE} = -1\text{ V}, I_C = -100\text{ mA}$			-1	
DC current gain	$h_{FE(1)}$	$V_{CE} = -1\text{ V}, I_C = -100\text{ mA}$	70		240	
	$h_{FE(2)}$	$V_{CE} = -1\text{ V}, I_C = -800\text{ mA}$	25		40	
Collector output capacitance	C_{ob}	$V_{CB} = -6\text{ V}, I_E = 0, f = 1\text{ MHz}$		13		μF
Transition frequency	f_T	$V_{CE} = -6\text{ V}, I_C = -20\text{ mA}$		200		MHz

■ Classification of $h_{FE(1)}$

Type	2SA1313-O	2SA1313-Y
Range	70-140	120-240
Marking	ACO	ACY

PNP Transistors

2SA1313

■ Typical Characteristics

