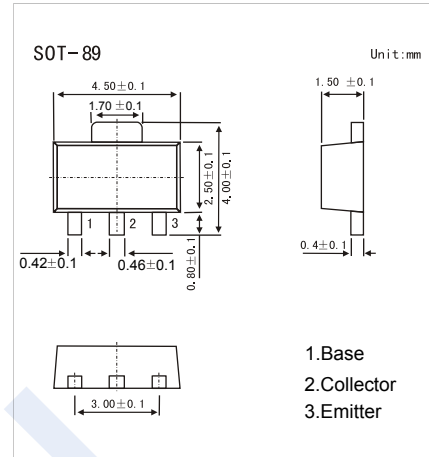


## PNP Transistors

### 2SB1000-HF

#### ■ Features

- Low frequency power amplifier
- Complementary to 2SD1366-HF
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-25	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-20	
Emitter - Base Voltage	V <sub>EB0</sub>	-5	
Collector Current - Continuous	I <sub>c</sub>	-1	A
Collector current -Pulse (Note.1)	I <sub>CP</sub>	-1.5	
Collector Power Dissipation	P <sub>c</sub>	1	W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

Note.1: PW ≤ 10ms, Duty cycle ≤ 20%

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = -100 μA, I <sub>E</sub> = 0	-25			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>c</sub> = -1 mA, I <sub>B</sub> = 0	-20			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = -100 μA, I <sub>c</sub> = 0	-5			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -20V, I <sub>E</sub> = 0			-0.1	μA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -4V, I <sub>c</sub> = 0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = -800 mA, I <sub>B</sub> = -80mA		-0.2	-0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> = -800 mA, I <sub>B</sub> = -80mA		-0.94	-1.1	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -500 mA	85		240	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz		38		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -500mA		200		MHz

#### ■ Classification of h<sub>FE</sub>

Type	2SB1000-H-HF	2SB1000-J-HF
Range	85-170	120-240
Marking	AH <sub>F</sub>	AJ <sub>F</sub>

## PNP Transistors

### 2SB1000-HF

#### ■ Typical Characteristics

MAXIMUM COLLECTOR DISSIPATION  
CURVE

