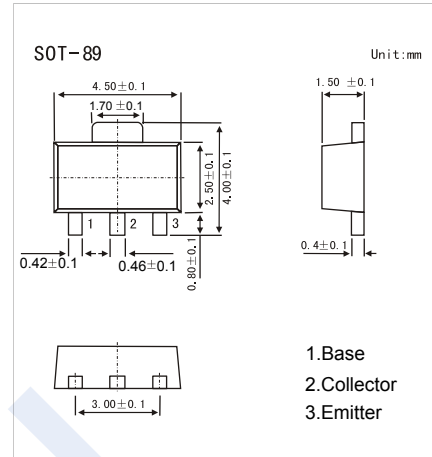


## PNP Transistors

### 2SB1001-HF

#### ■ Features

- Low frequency power amplifier
- Complementary to 2SD1367-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>	-20	V
Collector - Emitter Voltage	V <sub>CEO</sub>	-16	
Emitter - Base Voltage	V <sub>EBO</sub>	-6	
Collector Current - Continuous	I <sub>C</sub>	-2	A
Collector current -Pulse (Note.1)	I <sub>CP</sub>	-3	
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	-20			V
Collector- emitter breakdown voltage	V <sub>CEO</sub>	I <sub>C</sub> = -1 mA, R <sub>BE</sub> = ∞	-16			
Emitter - base breakdown voltage	V <sub>EBO</sub>	I <sub>E</sub> = -100 μA, I <sub>C</sub> = 0	-6			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -16V, I <sub>E</sub> = 0			-0.1	μA
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = -5V, I <sub>C</sub> = 0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = -1 A, I <sub>B</sub> = -100mA		-0.15	-0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = -1 A, I <sub>B</sub> = -100mA		-1	-1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -100 mA	100		320	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz		50		pF
Transition frequency	f <sub>r</sub>	V <sub>CE</sub> = -2V, I <sub>C</sub> = -10mA		150		MHz

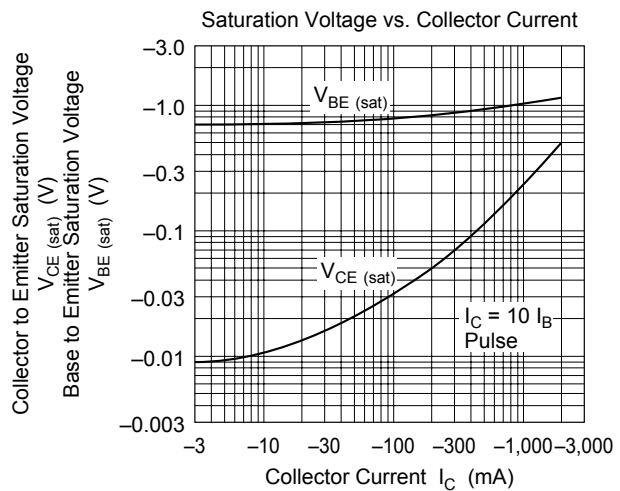
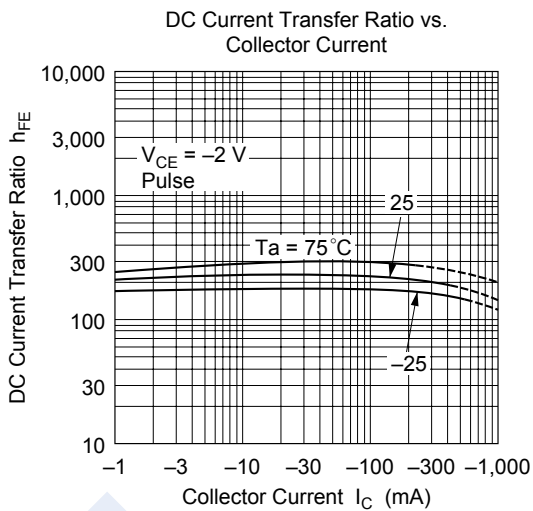
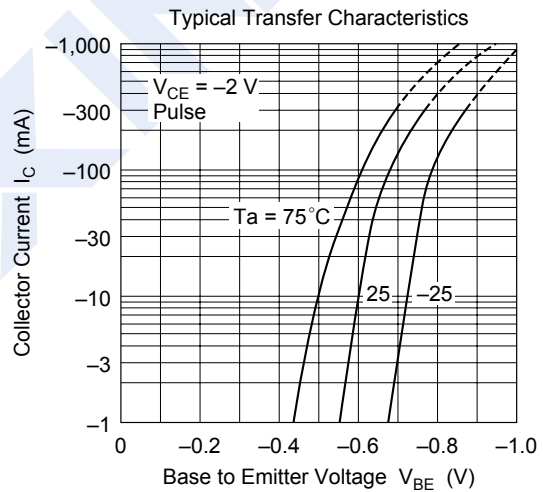
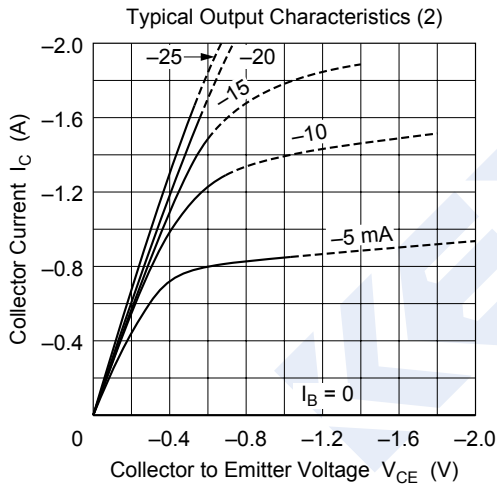
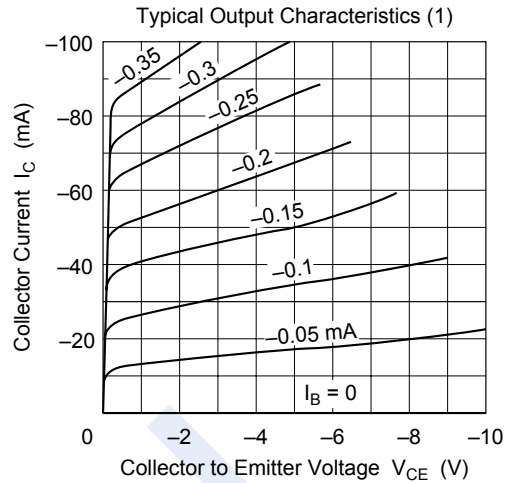
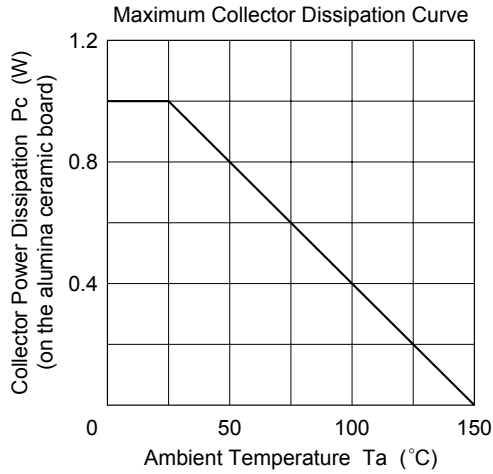
#### ■ Classification of h<sub>FE</sub>

Type	2SB1001-H-HF	2SB1001-J-HF
Range	100-200	160-320
Marking	BH <sub>F</sub>	BJ <sub>F</sub>

# PNP Transistors

## 2SB1001-HF

### Typical Characteristics



## PNP Transistors

## 2SB1001-HF

## ■ Typical Characteristics

