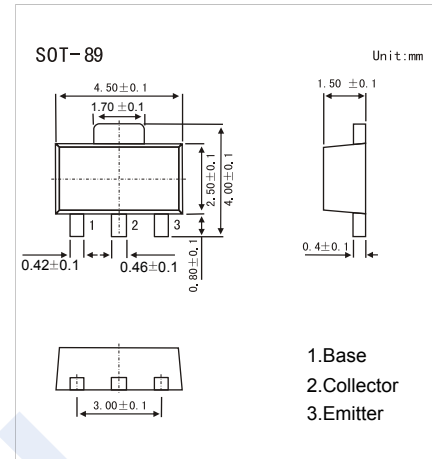


## NPN Transistors

### 2SD1368

#### ■ Features

- Low frequency power amplifier
- Complementary to 2SB1002



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	100	V
Collector - Emitter Voltage	V <sub>CE0</sub>	50	
Emitter - Base Voltage	V <sub>EB0</sub>	6	
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 ≤ 10 ms, 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 uA, I <sub>E</sub> = 0	100			V
Collector-emitter breakdown voltage	V <sub>CE0</sub>	I <sub>C</sub> = 1 mA, R <sub>BE</sub> = ∞	50			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = 100 uA, I <sub>C</sub> = 0	6			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = 80 V, I <sub>E</sub> = 0			0.1	uA
Emitter cut-off current	I <sub>EB0</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			0.3	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> = 1 A, I <sub>B</sub> = 100mA			1.2	
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 0.1 A	100		500	
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f=1MHz		20		pF
Transition frequency	f <sub>t</sub>	V <sub>CE</sub> = 2V, I <sub>C</sub> = 10mA		100		MHz

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

Type	2SD1368-A	2SD1368-B	2SD1368-C
Range	100-200	160-320	250-500
Marking	CA	CB	CC

## NPN Transistors

## 2SD1368

## ■ Typical Characteristics

