

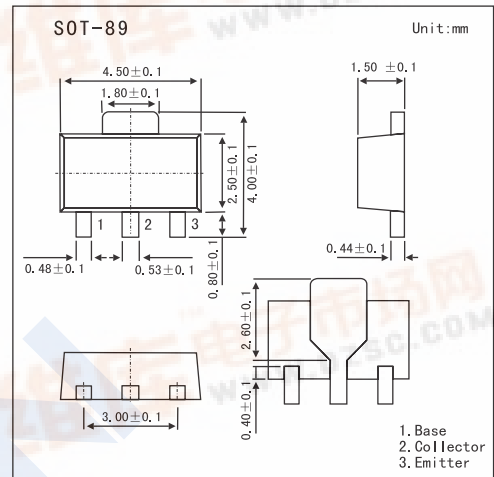
SMD Type Transistors

Audio Frequency Amplifier Applications

2SA1203

Features

- Suitable For Output Stage of 3 Watts Amplifier
- Small Flat Package
- $P_c = 1$ to 2W (mounted on ceramic substrate)
- Complementary to 2SC2883



Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|-----------------------------|-----------|-------------|------------|
| Collector-Base Voltage | V_{CB0} | -30 | V |
| Collector-Emitter Voltage | V_{CE0} | -30 | V |
| Emitter-Base Voltage | V_{EB0} | -5 | V |
| Collector Current | I_c | -1.5 | A |
| Base Current | I_B | -0.3 | A |
| Collector Power Dissipation | P_c | 500 | mW |
| | P_{c^*} | 1000 | |
| Junction temperature | T_j | 150 | $^\circ C$ |
| Storage temperature Range | T_{stg} | -55 to +150 | $^\circ C$ |

* Mounted on ceramic substrate (250 mm² x 0.8 t)

Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|------------------------------------|-----|-----|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -30V, I_E = 0$ | | | -0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5V, I_C = 0$ | | | -0.1 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -10mA, I_B = 0$ | -30 | | | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = -1mA, I_C = 0$ | -5 | | | V |
| DC Current Gain | h_{FE} | $V_{CE} = -2V, I_C = -500mA$ | 100 | | 320 | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -1.5A, I_B = -0.03A$ | | | -2.0 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -2V, I_C = -500mA$ | | | -1.0 | V |
| Transition Frequency | f_T | $V_{CE} = -2V, I_C = -500mA$ | | 120 | | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | | | 50 | pF |



2SA1203

hFE Classification

| | | |
|---------|-----------|-----------|
| Marking | H | |
| Rank | O | Y |
| hFE | 100 ~ 200 | 160 ~ 320 |

Electrical Characteristics Curves

