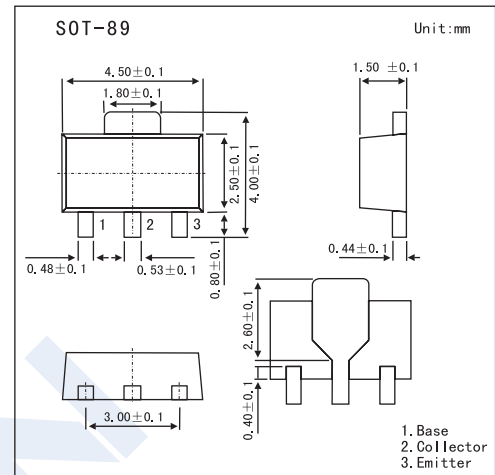


## Audio Frequency Amplifier Applications

## 2SC2883

## ■ Features

- Suitable For Output Stage of 3 Watts Amplifier
- Small Flat Package
- $P_c = 1$  to 2W (mounted on ceramic substrate)
- Complementary to 2SA1203

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

| 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         | $^\circ\text{C}$ |
| Storage temperature Range   | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

\* Mounted on a ceramic substrate (250 mm<sup>2</sup> x 0.8 t)

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

| Parameter                            | Symbol        | Testconditions                           | Min | Typ | Max | Unit          |
|--------------------------------------|---------------|--|-----|-----|-----|---------------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB} = 30V, I_E = 0$                  |     |     | 0.1 | $\mu\text{A}$ |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB} = 5V, I_C = 0$                   |     |     | 0.1 | $\mu\text{A}$ |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$ | $I_C = 10\text{mA}, I_B = 0$             | 30  |     |     | V             |
| Emitter-Base Breakdown Voltage       | $V_{(BR)EBO}$ | $I_E = 1\text{mA}, I_C = 0$              | 5   |     |     | V             |
| DC Current Gain                      | $h_{FE}$      | $V_{CE} = 2V, I_C = 500\text{mA}$        | 100 |     | 320 |               |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 1.5A, I_B = 0.03A$                |     |     | 2   | V             |
| Base-Emitter Voltage                 | $V_{BE}$      | $V_{CE} = 2V, I_C = 500\text{mA}$        |     |     | 1   | V             |
| Transition Frequency                 | $f_T$         | $V_{CE} = 2V, I_C = 500\text{mA}$        |     | 120 |     | MHz           |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB} = 10V, I_E = 0, f = 1\text{MHz}$ |     |     | 40  | pF            |

## 2SC2883

### hFE Classification

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

### Electrical Characteristics Curves

