



**2SC3907**

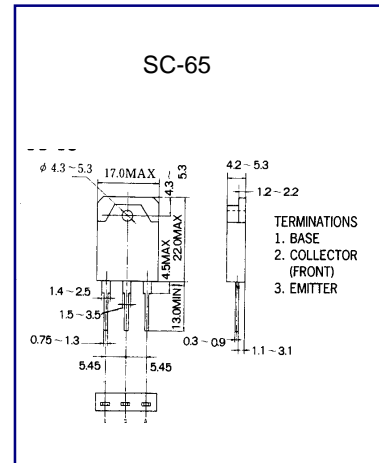
**NPN PLANAR SILICON TRANSISTOR**

**AUDIO POWER AMPLIFIER  
DC TO DC CONVERTER**

- High Current Capability
- High Power Dissipation
- Complementary to 2SA1516

**ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C)**

| Characteristic            | Symbol           | Rating  | Unit |
|---------------------------|------------------|---------|------|
| Collector-Base Voltage    | V <sub>CB0</sub> | 180     | V    |
| Collector-Emitter Voltage | V <sub>CE0</sub> | 180     | V    |
| Emitter-Base voltage      | V <sub>EB0</sub> | 6       | V    |
| Collector Current (DC)    | I <sub>C</sub>   | 12      | A    |
| Collector Dissipation     | P <sub>C</sub>   | 130     | W    |
| Junction Temperature      | T <sub>j</sub>   | 150     | °C   |
| Storage Temperature       | T <sub>stg</sub> | -55~150 | °C   |



**ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)**

| Characteristic                        | Symbol               | Test Condition                           | Min | Typ | Max | Unit |
|---------------------------------------|----------------------|--|-----|-----|-----|------|
| Collector Base Breakdown Voltage      | BV <sub>CB0</sub>    | I <sub>C</sub> =5 mA I <sub>E</sub> =0   | 200 |     |     | V    |
| Collector Emitter Breakdown Voltage   | BV <sub>CE0</sub>    | I <sub>C</sub> =10 mA R <sub>BE</sub> =∞ | 140 |     |     | V    |
| Emitter Base Breakdown Voltage        | BV <sub>EB0</sub>    | I <sub>E</sub> =5mA I <sub>C</sub> =0    | 6   |     |     | V    |
| Collector Cutoff Current              | I <sub>CB0</sub>     | V <sub>CB</sub> =100V I <sub>E</sub> =0  |     |     | 0.1 | mA   |
| Emitter Cutoff Current                | I <sub>EB0</sub>     | V <sub>EB</sub> =4V I <sub>C</sub> =0    |     |     | 0.1 | mA   |
| *DC Current Gain                      | h <sub>FE1</sub>     | V <sub>CE</sub> =5V I <sub>C</sub> =1A   | 55  |     | 160 |      |
| DC Current Gain                       | h <sub>FE2</sub>     | V <sub>CE</sub> =5V I <sub>C</sub> =5A   | 50  |     |     |      |
| Collector- Emitter Saturation Voltage | V <sub>CE(sat)</sub> | I <sub>C</sub> =8A I <sub>B</sub> =0.8A  |     |     | 2.0 | V    |