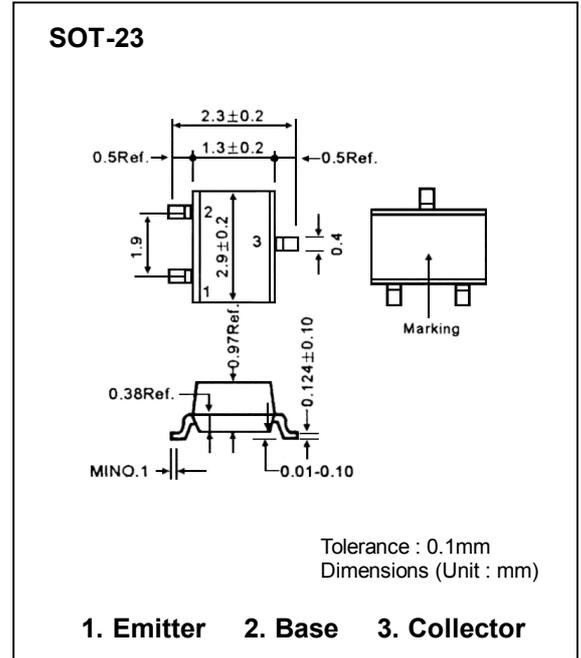


1.25W OUTPUT AMPLIFIER OF PORTABLE RADIOS IN CLASS B PUSH-PULL OPERATION

- Collector-Emitter Voltage: $V_{CE0} = 25V$
- Collector Dissipation: $P_C = 625mW$

Absolute Maximum Ratings (TA=25°C)

| Characteristic | Symbol | Rating | Unit |
|---------------------------|-----------|----------|------|
| Collector-Base Voltage | V_{CBO} | 40 | V |
| Collector-Emitter Voltage | V_{CEO} | 25 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 1500 | mA |
| Collector Dissipation | P_C | 625 | mW |
| Junction Temperature | T_J | 150 | °C |
| Storage Temperature | T_{STG} | -65~+150 | °C |



Electrical Characteristics (TA=25°C)

| Characteristic | Symbol | Test Conditions | Min | Max | Unit |
|--------------------------------------|---------------|--|-----|-----|---------|
| Collector-Base Breakdown Voltage | BV_{CBO} | $I_C = 100\mu A, I_E = 0$ | 40 | | V |
| Collector-Emitter Breakdown Voltage | BV_{CEO} | $I_C = 0.1mA, I_B = 0$ | 25 | | V |
| Emitter-Base Breakdown Voltage | BV_{EBO} | $I_E = 100\mu A, I_C = 0$ | 6 | | V |
| Collector Cut-off Current | I_{CBO} | $V_{CB} = 40V, I_E = 0$ | | 0.1 | μA |
| Collector Cut-off Current | I_{CEO} | $V_{CE} = 20V, I_B = 0$ | | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = 5V, I_C = 0mA$ | | 0.1 | μA |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE} = 1V, I_C = 50mA$ | 120 | 350 | |
| | $h_{FE(2)}$ | $V_{CE} = 1V, I_C = 500mA$ | 40 | | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 500mA, I_B = 50mA$ | | 0.5 | V |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = 500mA, I_B = 50mA$ | | 1.2 | V |
| Base-Emitter Voltage | V_{BEF} | $I_E = 100mA$ | | 1.6 | V |
| Transition Frequency | f_T | $V_{CE} = 6V, I_C = 20mA$ $f = 30MHz$ | 100 | | MHz |

$h_{FE(1)}$ CLASSIFICATION

| Classification | L | H |
|----------------|---------|---------|
| $h_{FE(1)}$ | 120-200 | 200-350 |

Device Marking

SS8050LT1=Y1