

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1359

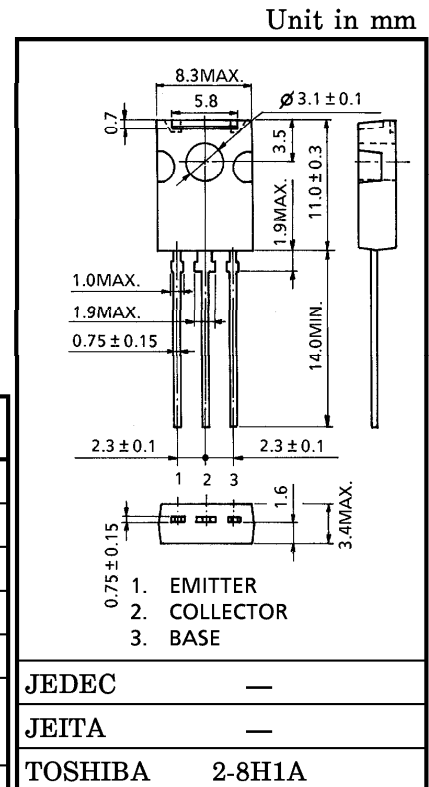
AUDIO FREQUENCY POWER AMPLIFIER

LOW SPEED SWITCHING

- Suitable for Output Stage of 5 Watts Car Radio and Car Stereo.
- Good Linearity of h_{FE} .
- Complementary to 2SC3422.

MAXIMUM RATINGS ($T_c = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|--------------------------|------------------|
| Collector-Base Voltage | V_{CB0} | -40 | V |
| Collector-Emitter Voltage | V_{CE0} | -40 | V |
| Emitter-Base Voltage | V_{EB0} | -5 | V |
| Collector Current | I_C | -3 | A |
| Base Current | I_B | -1 | A |
| Collector Power Dissipation | P_C | $T_a = 25^\circ\text{C}$ | 1.5 |
| | | $T_c = 25^\circ\text{C}$ | 10 |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55~150 | $^\circ\text{C}$ |

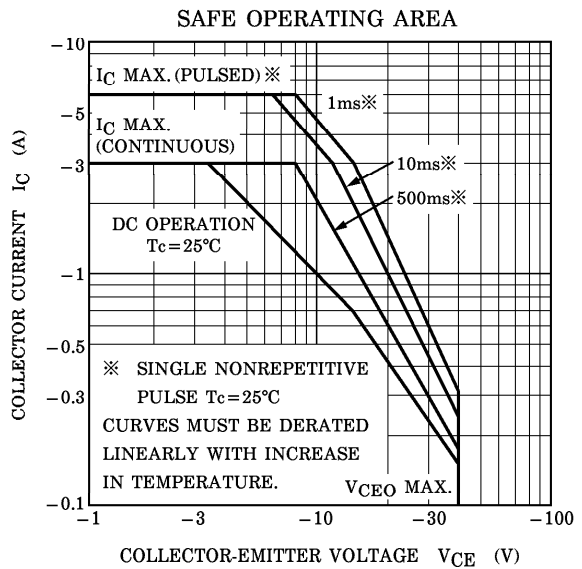
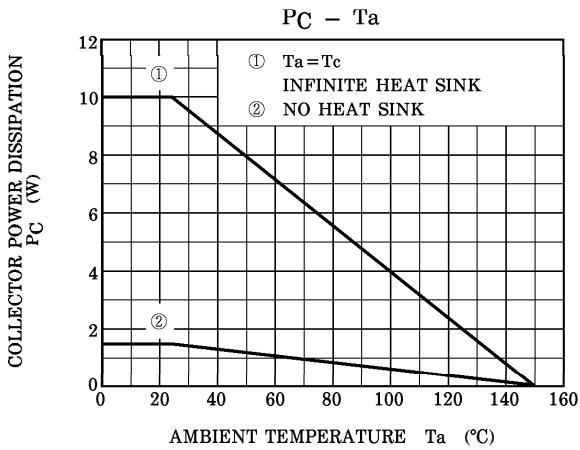
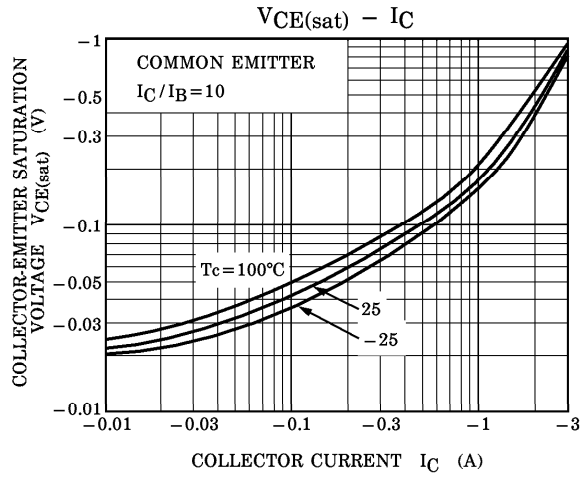
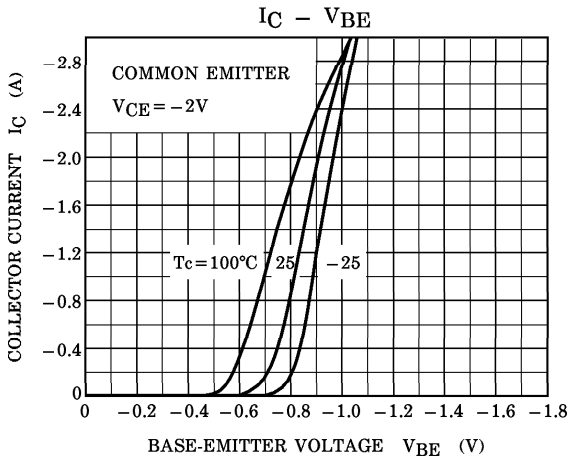
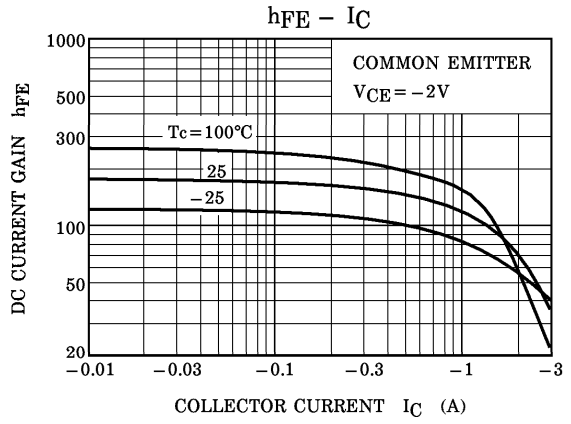
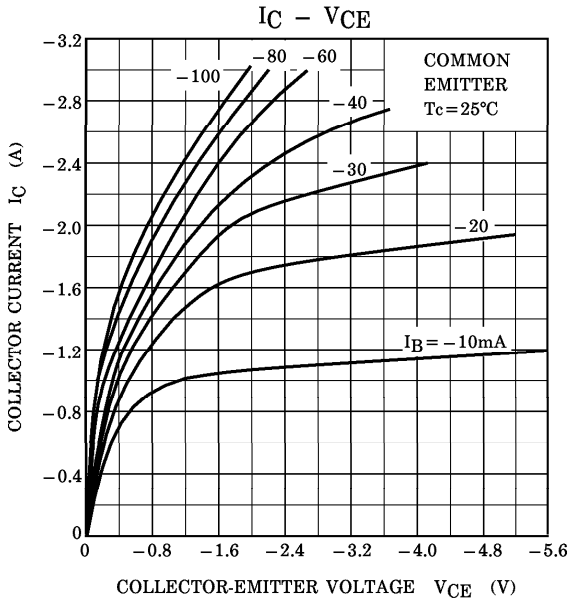


Weight : 0.82g (Typ.)

ELECTRICAL CHARACTERISTICS ($T_c = 25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------------|--|------|------|------|------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -40\text{V}, I_E = 0$ | — | — | 100 | nA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5\text{V}, I_C = 0$ | — | — | 100 | nA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -10\text{mA}, I_B = 0$ | -40 | — | — | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE} = -2\text{V}, I_C = -0.5\text{A}$ | 80 | — | 240 | |
| | $h_{FE(2)}$ | $V_{CE} = -2\text{V}, I_C = -2.5\text{A}$ | 25 | — | — | |
| Collector Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -2\text{A}, I_B = -0.2\text{A}$ | — | — | -0.8 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -2\text{V}, I_C = -0.5\text{A}$ | — | — | -1.0 | V |
| Transition Frequency | f_T | $V_{CE} = -2\text{V}, I_C = -0.5\text{A}$ | — | 100 | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$ | — | 35 | — | pF |

(Note) : h_{FE} Classification O : 80~160, Y : 120~240



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