

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL (PCT PROCESS)

2SA1182

AUDIO FREQUENCY LOW POWER AMPLIFIER APPLICATIONS

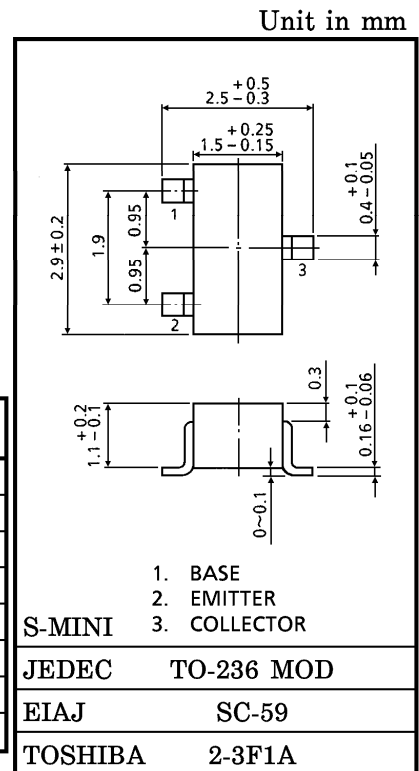
DRIVER STAGE AMPLIFIER APPLICATIONS

SWITCHING APPLICATIONS

- Excellent h_{FE} Linearity
: $h_{FE} (2) = 25$ (Min.) at $V_{CE} = -6\text{ V}$ $I_C = -400\text{ mA}$
- Complementary to 2SC2859.

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------------------|
| Collector-Base Voltage | V_{CB0} | -35 | V |
| Collector-Emitter Voltage | V_{CEO} | -30 | V |
| Emitter-Base Voltage | V_{EB0} | -5 | V |
| Collector Current | I_C | -500 | mA |
| Base Current | I_B | -50 | mA |
| Collector Power Dissipation | P_C | 150 | mW |
| Junction Temperature | T_j | 125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55~125 | $^\circ\text{C}$ |



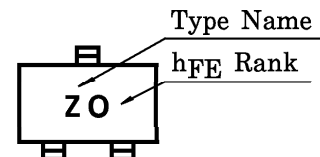
Weight : 0.012 g

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

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------------|---|------|------|-------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -35\text{ V}, I_E = 0$ | — | — | -0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5\text{ V}, I_C = 0$ | — | — | -0.1 | μA |
| DC Current Gain (Note) | $h_{FE} (1)$ | $V_{CE} = -1\text{ V}, I_C = -100\text{ mA}$ | 70 | — | 240 | |
| | $h_{FE} (2)$ | $V_{CE} = -6\text{ V}, I_C = -400\text{ mA}$ | 25 | — | — | |
| Collector-Emitter Saturation Voltage | $V_{CE} (\text{sat})$ | $I_C = -100\text{ mA}, I_B = -10\text{ mA}$ | — | -0.1 | -0.25 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -1\text{ V}, I_C = -100\text{ mA}$ | — | -0.8 | -1.0 | V |
| Transition Frequency | f_T | $V_{CE} = -6\text{ V}, I_C = -20\text{ mA}$ | — | 200 | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -6\text{ V}, I_E = 0, f = 1\text{ MHz}$ | — | 13 | — | pF |

(Note) : $h_{FE} (1)$ Classification O : 70~140, Y : 120~240
 $h_{FE} (2)$ Classification O : 25 (Min.) Y : 40 (Min.)

Marking



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