

TOSHIBA

2SA1930

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE

2SA1930

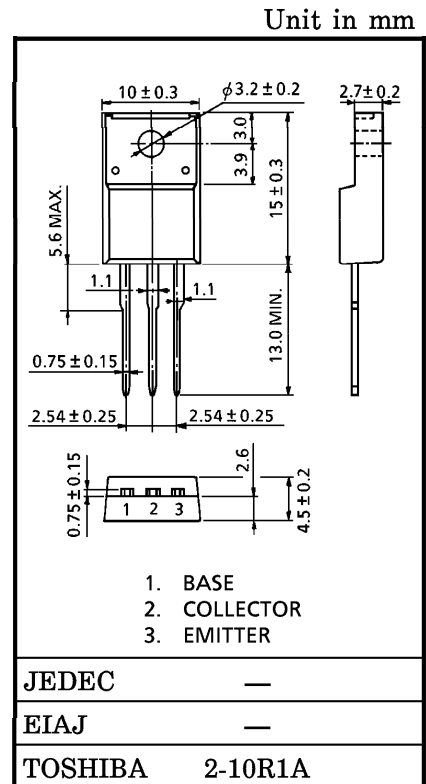
POWER AMPLIFIER APPLICATIONS

DRIVER STAGE AMPLIFIER APPLICATIONS

- High Transition Frequency : $f_T = 200$ MHz (Typ.)
- Complementary to 2SC5171

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage | V_{CB0} | -180 | V |
| Collector-Emitter Voltage | V_{CEO} | -180 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current | I_C | -2 | A |
| Base Current | I_B | -1 | A |
| Collector Power Dissipation | P_C | Ta = 25°C | 2.0 |
| | | Tc = 25°C | 20 |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °C |



Weight : 1.7 g (Typ.)

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|--|------|-------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -180$ V, $I_E = 0$ | — | — | -5.0 | μ A |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5$ V, $I_C = 0$ | — | — | -5.0 | μ A |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -10$ mA, $I_B = 0$ | -180 | — | — | V |
| DC Current Gain | $h_{FE(1)}$ | $V_{CE} = -5$ V, $I_C = -0.1$ A | 100 | — | 320 | |
| | $h_{FE(2)}$ | $V_{CE} = -5$ V, $I_C = -1$ A | 50 | — | — | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -1$ A, $I_B = -0.1$ A | — | -0.24 | -1.0 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -5$ V, $I_C = -1$ A | — | -0.68 | -1.5 | V |
| Transition Frequency | f_T | $V_{CE} = -5$ V, $I_C = -0.3$ A | — | 200 | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10$ V, $I_E = 0$, $f = 1$ MHz | — | 26 | — | pF |

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