

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1296

POWER AMPLIFIER APPLICATIONS

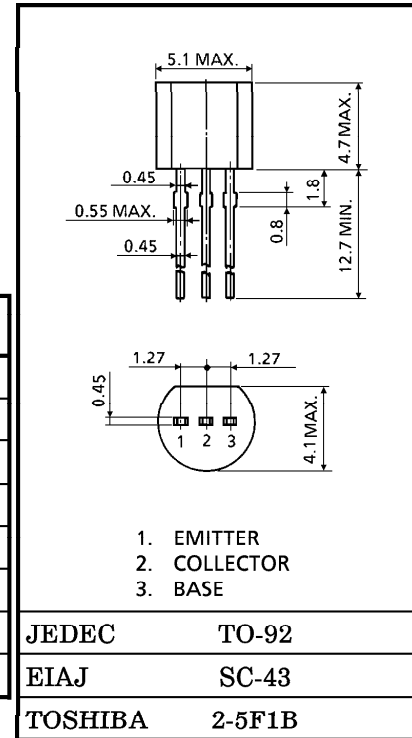
POWER SWITCHING APPLICATIONS

- Low Saturation Voltage : $V_{CE(sat)} = -0.5 \text{ (Max.) @ } I_C = -2A$
- Complementary to 2SC3266.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage | V_{CBO} | -20 | V |
| Collector-Emitter Voltage | V_{CEO} | -20 | V |
| Emitter-Base Voltage | V_{EBO} | -6 | V |
| Collector Current | I_C | -2 | A |
| Base Current | I_B | -0.5 | A |
| Collector Power Dissipation | P_C | 750 | mW |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55~150 | °C |

Unit in mm



Weight : 0.21g

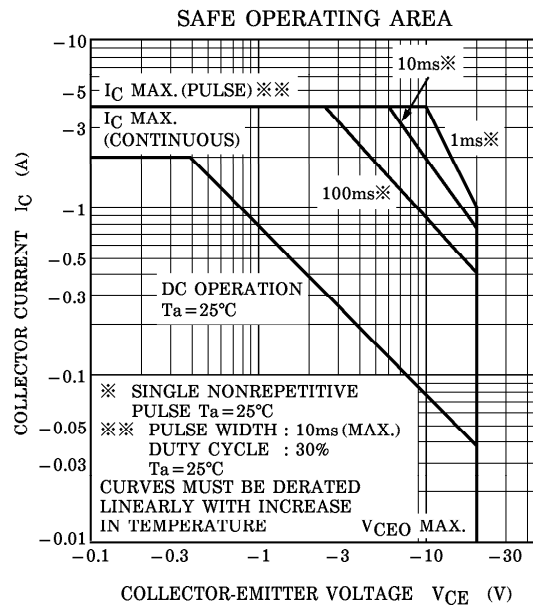
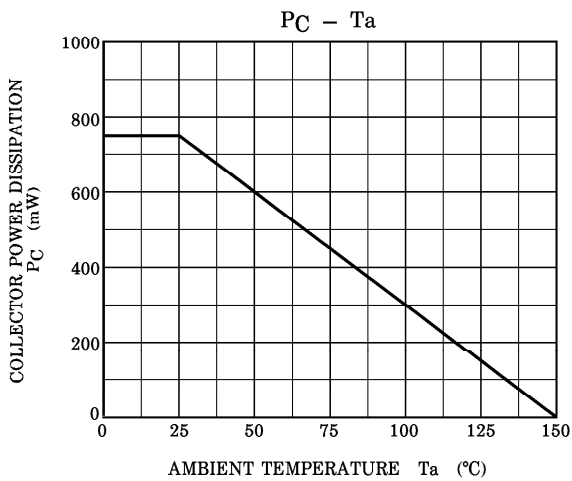
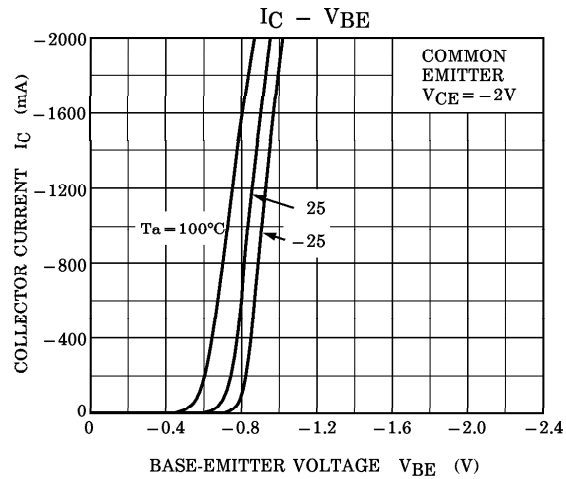
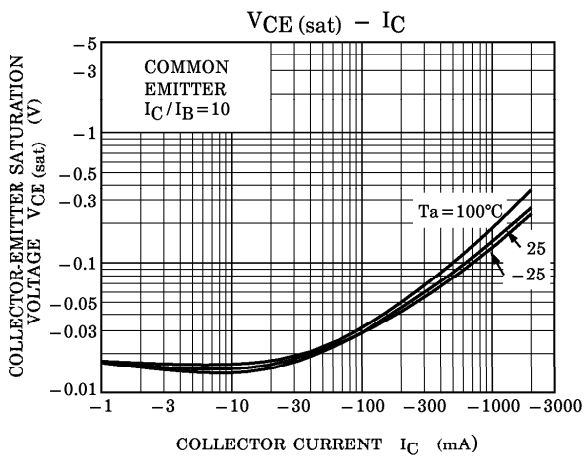
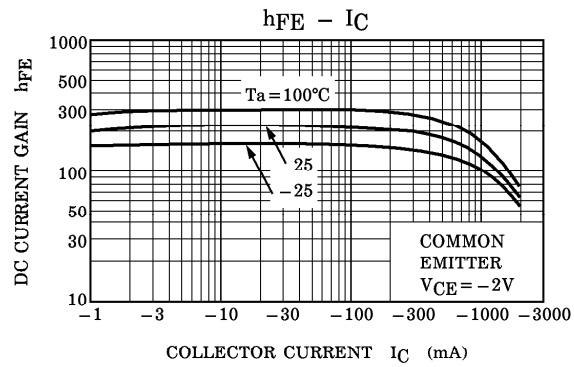
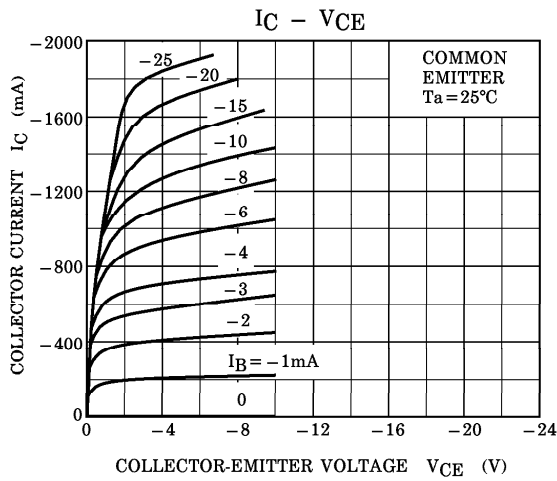
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|------------------------------------|------|------|-------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -20V, I_E = 0$ | — | — | -0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -6V, I_C = 0$ | — | — | -0.1 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -10mA, I_B = 0$ | -20 | — | — | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = -0.1mA, I_C = 0$ | -6 | — | — | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE} = -2V, I_C = -0.1A$ | 120 | — | 400 | |
| | $h_{FE(2)}$ | $V_{CE} = -2V, I_C = -2A$ | 40 | — | — | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -2A, I_B = -0.1A$ | — | — | -0.5 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -2V, I_C = -0.1A$ | — | — | -0.85 | V |
| Transition Frequency | f_T | $V_{CE} = -2V, I_C = -0.5A$ | — | 120 | — | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | — | 40 | — | pF |

Note : $h_{FE(1)}$ Y : 120~240, GR : 200~400

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