

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE (PCT PROCESS)

2SC3333

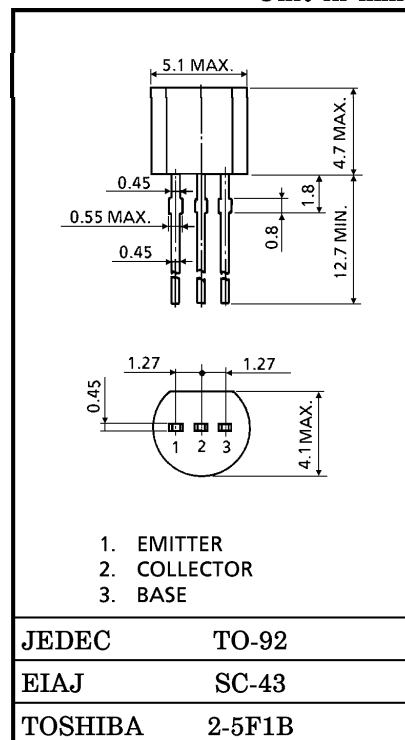
HIGH VOLTAGE SWITCHING APPLICATIONS
 COLOR TV CHROMA OUTPUT APPLICATIONS

Unit in mm

- High Voltage : $V_{CEO} = 250V$
- Low C_{re} : 1.8pF (Max.)
- Complementary to 2SA1320

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|----------|------------|
| Collector-Base Voltage | V_{CBO} | 250 | V |
| Collector-Emitter Voltage | V_{CEO} | 250 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | DC | I_C | 50 |
| | Pulsed | I_{CP} | 100 |
| Base Current | I_B | 20 | mA |
| Collector Power Dissipation | P_C | 0.6 | W |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -55~150 | $^\circ C$ |



Weight : 0.21g

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

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|---------------|-----------------------------------|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = 200V, I_E = 0$ | — | — | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = 5V, I_C = 0$ | — | — | 0.1 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = 1mA, I_B = 0$ | 250 | — | — | V |
| DC Current Gain | h_{FE} | $V_{CE} = 20V, I_C = 25mA$ | 50 | — | — | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = 10mA, I_B = 1mA$ | — | — | 1.5 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = 20V, I_C = 25mA$ | — | 0.75 | — | V |
| Transition Frequency | f_T | $V_{CE} = 10V, I_C = 10mA$ | 60 | 100 | — | MHz |
| Reverse Transfer Capacitance | C_{re} | $V_{CB} = 30V, I_E = 0, f = 1MHz$ | — | — | 1.8 | pF |

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