## <u>TOSHIBA</u>

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

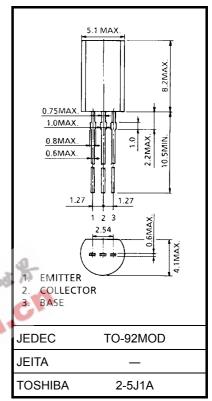
# 2SC2482

High-Voltage Switching and Amplifier Applications Color TV Horizontal Driver Applications Color TV Chroma Output Applications

- High breakdown voltage: VCEO = 300 V
- Small collector output capacitance:  $C_{ob} = 3.0 \text{ pF}$  (typ.)
- Recommended for chroma output and driver applications for line-operated TV horizontal.

### Absolute Maximum Ratings (Ta = 25°C)

| Characteristics             | Symbol           | Rating     | Unit |   |
|-----------------------------|------------------|------------|------|---|
| Collector-base voltage      | V <sub>CBO</sub> | 300        | V    |   |
| Collector-emitter voltage   | V <sub>CEO</sub> | 300        | V    |   |
| Emitter-base voltage        | V <sub>EBO</sub> | 7          | V    | 6 |
| Collector current           | Ι <sub>C</sub>   | 100        | mA   | - |
| Base current                | Ι <sub>Β</sub>   | 50         | mA   |   |
| Collector power dissipation | Pc               | 900        | mW   |   |
| Junction temperature        | Тј               | 150        | °C   |   |
| Storage temperature range   | T <sub>stg</sub> | -55 to 150 | °C   |   |



Weight: 0.36 g (typ.)

Note: Using continuously under heavy loads (e.g. the application of high

temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating

temperature/current/voltage, etc.) are within the absolute maximum ratings.

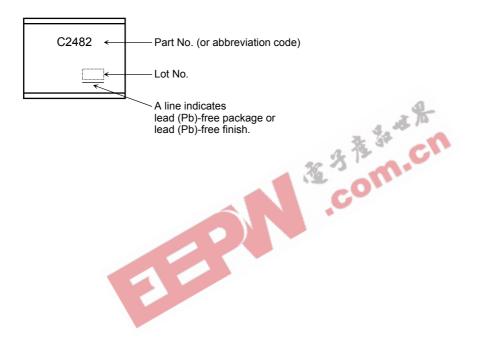
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Unit: mm

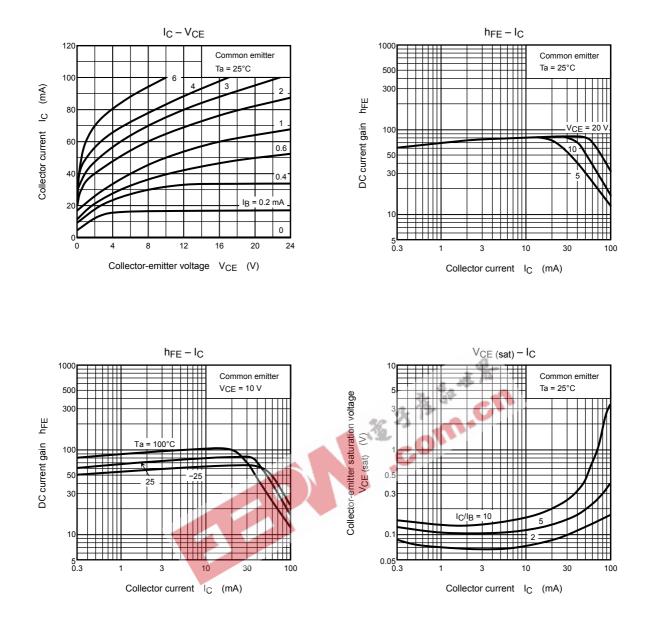
**Electrical Characteristics (Ta = 25°C)** 

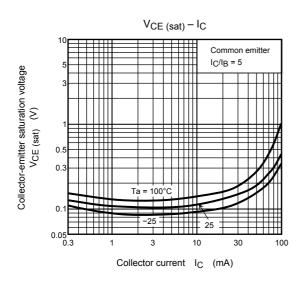
| Characteristics                      | Symbol                | Test Condition  | Min | Тур. | Max | Unit |
|--------------------------------------|-----------------------|---|-----|------|-----|------|
| Collector cut-off current            | I <sub>CBO</sub>      | V <sub>CB</sub> = 240 V, I <sub>E</sub> = 0           | _   | _    | 1.0 | μA   |
| Emitter cut-off current              | I <sub>EBO</sub>      | V <sub>EB</sub> = 7 V, I <sub>C</sub> = 0             | —   | —    | 1.0 | μA   |
| DC current gain                      | h <sub>FE (1)</sub>   | V <sub>CE</sub> = 10 V, I <sub>C</sub> = 4 mA         | 20  | —    | _   |      |
|                                      | h <sub>FE (2)</sub>   | V <sub>CE</sub> = 10 V, I <sub>C</sub> = 20 mA        | 30  | —    | 150 |      |
| Collector-emitter saturation voltage | V <sub>CE (sat)</sub> | I <sub>C</sub> = 10 mA, I <sub>B</sub> = 1 mA         | —   | —    | 1.0 | V    |
| Base-emitter saturation voltage      | V <sub>BE (sat)</sub> | I <sub>C</sub> = 10 mA, I <sub>B</sub> = 1 mA         | —   | —    | 1.0 | V    |
| Transition frequency                 | f <sub>T</sub>        | V <sub>CE</sub> = 10 V, I <sub>C</sub> = 20 mA        | 50  | _    | _   | MHz  |
| Collector output capacitance         | C <sub>ob</sub>       | V <sub>CB</sub> = 20 V, I <sub>E</sub> = 0, f = 1 MHz | _   | 3.0  | _   | pF   |

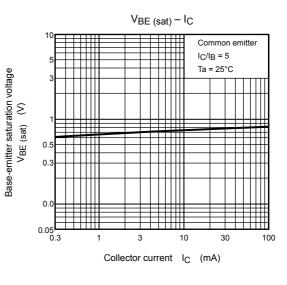
#### Marking



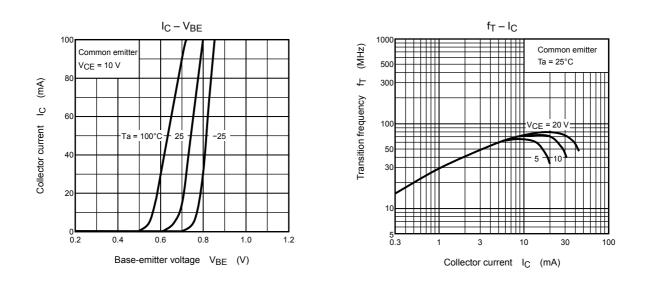
## **TOSHIBA**

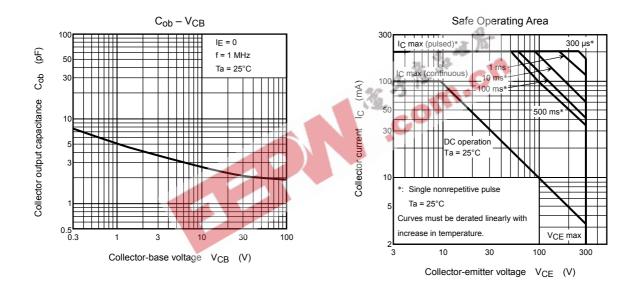






## **TOSHIBA**





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