

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

2SA1425

Power Amplifier Applications
 Driver-Stage Amplifier Applications

- Complementary to 2SC3665.

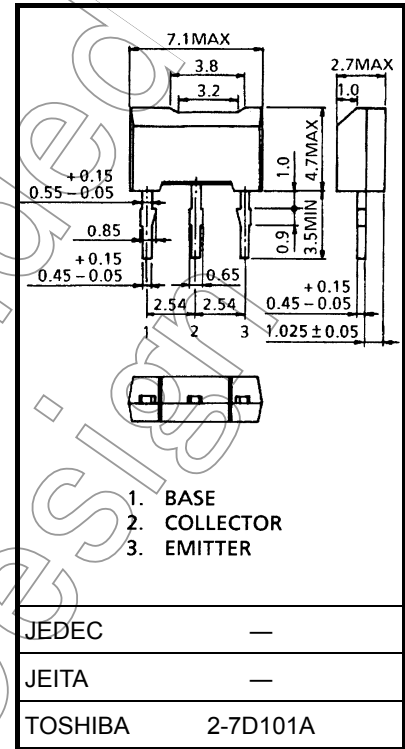
Absolute Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|-----------------------------|------------------|------------|------|
| Collector-base voltage | V _{CBO} | -120 | V |
| Collector-emitter voltage | V _{CEO} | -120 | V |
| Emitter-base voltage | V _{EBO} | -5 | V |
| Collector current | I _C | -800 | mA |
| Base current | I _B | -80 | mA |
| Collector power dissipation | P _C | 1000 | mW |
| Junction temperature | T _j | 150 | °C |
| Storage temperature range | T _{stg} | -55 to 150 | °C |

Note1: 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



Weight: 0.2 g (typ.)

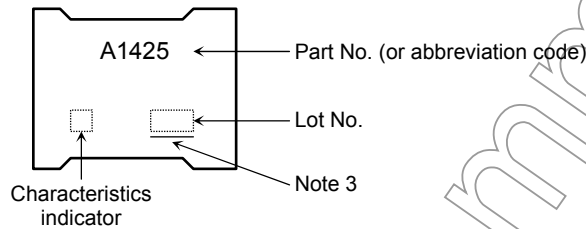
Not for New

Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|--------------------------------------|----------------------|--|------|------|------|------|
| Collector cut-off current | I_{CBO} | $V_{CB} = -120\text{ V}, I_E = 0$ | — | — | -100 | nA |
| Emitter cut-off current | I_{EBO} | $V_{EB} = -5\text{ V}, I_C = 0$ | — | — | -100 | nA |
| Collector-emitter breakdown voltage | $V_{(BR) CEO}$ | $I_C = -10\text{ mA}, I_B = 0$ | -120 | — | — | V |
| Emitter-base breakdown voltage | $V_{(BR) EBO}$ | $I_E = -1\text{ mA}, I_C = 0$ | -5 | — | — | V |
| DC current gain | h_{FE} (Note 2) | $V_{CE} = -5\text{ V}, I_C = -100\text{ mA}$ | 80 | — | 240 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -500\text{ mA}, I_B = -50\text{ mA}$ | — | — | -1.0 | V |
| Base-emitter voltage | V_{BE} | $V_{CE} = -5\text{ V}, I_C = -500\text{ mA}$ | — | — | -1.0 | V |
| Transition frequency | f_T | $V_{CE} = -5\text{ V}, I_C = -100\text{ mA}$ | — | 120 | — | MHz |
| Collector output capacitance | C_{ob} | $V_{CB} = -10\text{ V}, I_E = 0, f = 1\text{ MHz}$ | — | — | 40 | pF |

Note 2: h_{FE} classification O: 80 to 160, Y: 120 to 240

Marking

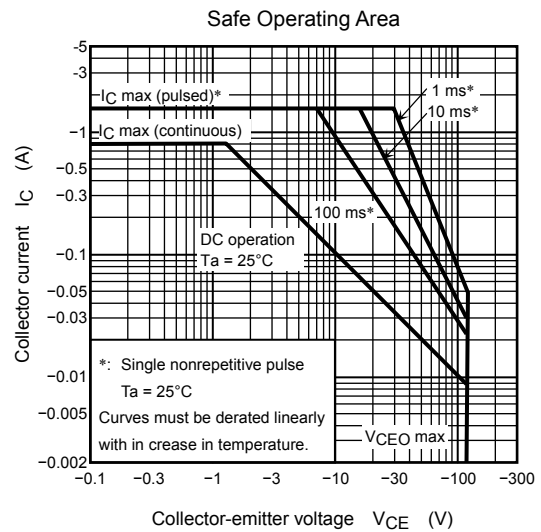
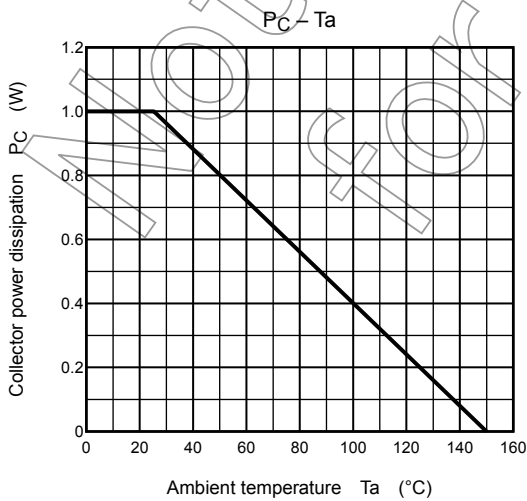
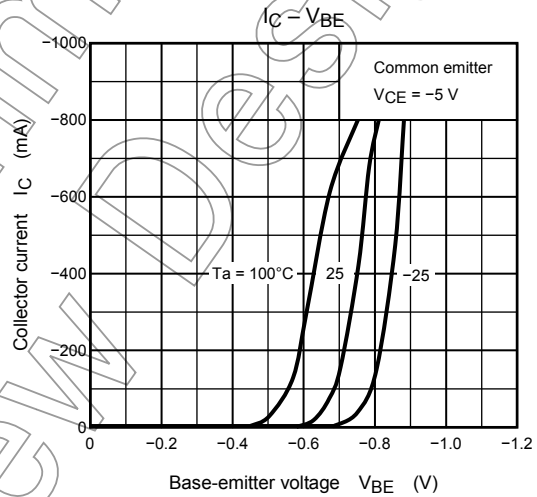
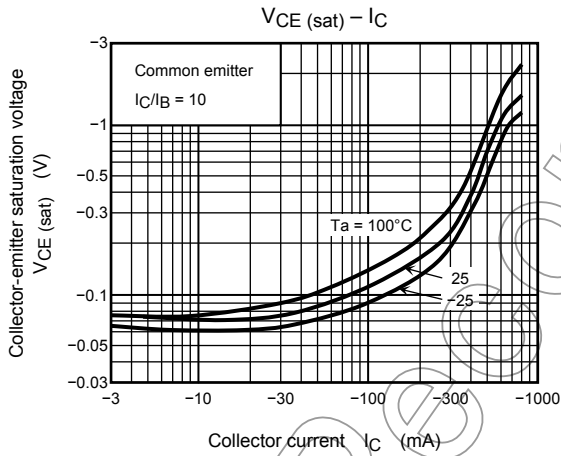
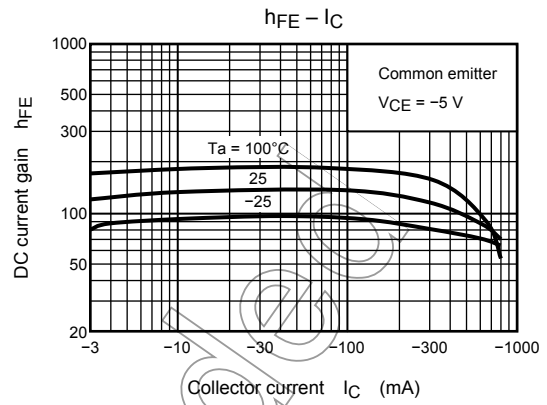
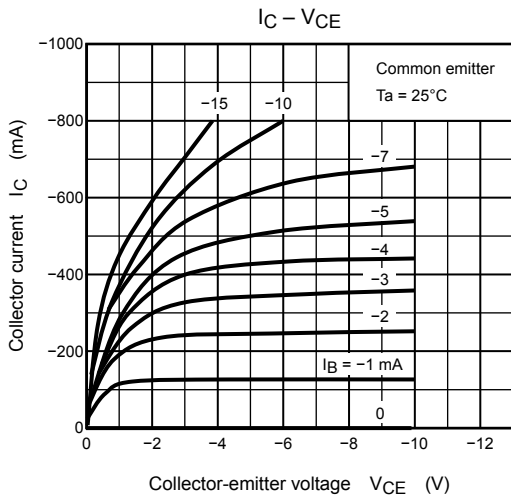


Note 3: A line under a Lot No. identifies the indication of product Labels.

Not underlined: $[[Pb]]/INCLUDES > MCV$

Underlined: $[[G]]/RoHS COMPATIBLE$ or $[[G]]/RoHS [[Pb]]$

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