

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC3665

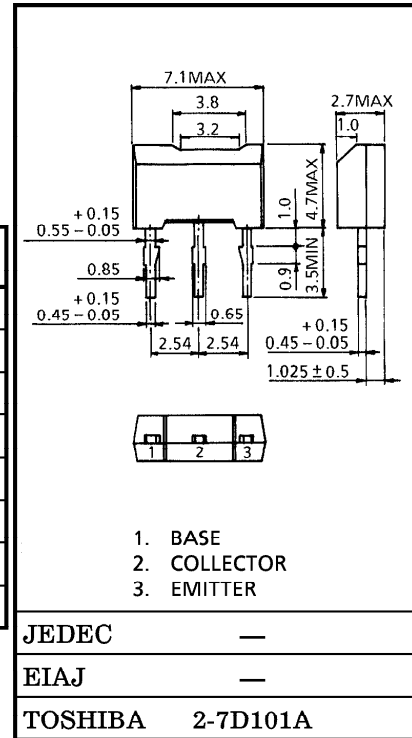
AUDIO POWER AMPLIFIER APPLICATIONS
DRIVER STAGE AMPLIFIER APPLICATIONS

Unit in mm

- Complementary to 2SA1425.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|------------------|---------|------|
| Collector-Base Voltage | V _{CB0} | 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} | -55~150 | °C |



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 0.2g (Typ.)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|------------------------|---|------|------|------|------|
| Collector Cut-off Current | I _{CBO} | V _{CB} = 120V, I _E = 0 | — | — | 100 | nA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} = 5V, I _C = 0 | — | — | 100 | nA |
| Collector-Emitter Breakdown Voltage | V _{(BR) CEO} | I _C = 10mA, I _B = 0 | 120 | — | — | V |
| Emitter-Base Breakdown Voltage | V _{(BR) EBO} | I _E = 1mA, I _C = 0 | 5 | — | — | V |
| DC Current Gain | h _{FE} (Note) | V _{CE} = 5V, I _C = 100mA | 80 | — | 240 | |
| Collector-Emitter Saturation Voltage | V _{CE (sat)} | I _C = 500mA, I _B = 50mA | — | — | 1.0 | V |
| Base-Emitter Voltage | V _{BE} | V _{CE} = 5V, I _C = 500mA | — | — | 1.0 | V |
| Transition Frequency | f _T | V _{CE} = 5V, I _C = 100mA | — | 120 | — | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} = 10V, I _E = 0, f = 1MHz | — | — | 30 | pF |

Note : h_{FE} Classification O : 80~160, Y : 120~240

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