

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

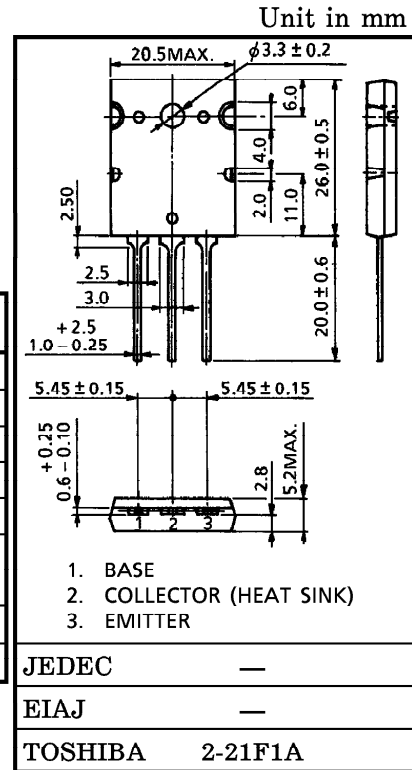
2SC5200

POWER AMPLIFIER APPLICATIONS

- Complementary to 2SA1943
- Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|------------------|---------|------|
| Collector-Base Voltage | V _{CB0} | 230 | V |
| Collector-Emitter Voltage | V _{CEO} | 230 | V |
| Emitter-Base Voltage | V _{EBO} | 5 | V |
| Collector Current | I _C | 15 | A |
| Base Current | I _B | 1.5 | A |
| Collector Power Dissipation (T _c = 25°C) | P _C | 150 | W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _{stg} | -55~150 | °C |



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

Weight : 9.75g (Typ.)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-------------------------------|---|------|------|------|------|
| Collector Cut-off Current | I _{CB0} | V _{CB} = 230V, I _E = 0 | — | — | 5.0 | μA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} = 5V, I _C = 0 | — | — | 5.0 | μA |
| Collector-Emitter Breakdown Voltage | V _{(BR) CEO} | I _C = 50mA, I _B = 0 | 230 | — | — | V |
| DC Current Gain | h _{FE} (1) (Note) | V _{CE} = 5V, I _C = 1A | 55 | — | 160 | |
| | h _{FE} (2) | V _{CE} = 5V, I _C = 7A | 35 | 60 | — | |
| Collector-Emitter Saturation Voltage | V _{CE (sat)} | I _C = 8A, I _B = 0.8A | — | 0.40 | 3.0 | V |
| Base-Emitter Voltage | V _{BE} | V _{CE} = 5V, I _C = 7A | — | 1.0 | 1.5 | V |
| Transition Frequency | f _T | V _{CE} = 5V, I _C = 1A | — | 30 | — | MHz |
| Collector Output Capacitance | C _{ob} | V _{CB} = 10V, I _E = 0, f = 1MHz | — | 200 | — | pF |

Note : h_{FE} (1) Classification R : 55~110, O : 80~160

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