TOSHIBA Transistor Silicon NPN Triple Diffused Type

2SC5200

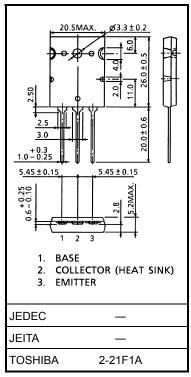
Power Amplifier Applications

Unit: mm

- High breakdown voltage: VCEO = 230 V (min)
- Complementary to 2SA1943
- Suitable for use in 100-W high fidelity audio amplifier's output stage

Maximum Ratings (Tc = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---|------------------|------------|------|
| Collector-base voltage | V_{CBO} | 230 | V |
| Collector-emitter voltage | V _{CEO} | 230 | V |
| Emitter-base voltage | V _{EBO} | 5 | V |
| Collector current | I _C | 15 | Α |
| Base current | lΒ | 1.5 | Α |
| Collector power dissipation (Tc = 25°C) | P _C | 150 | W |
| Junction temperature | Tj | 150 | °C |
| Storage temperature range | T _{stg} | -55 to 150 | °C |



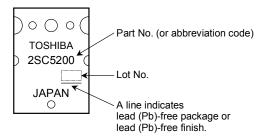
Weight: 9.75 g (typ.)

Electrical Characteristics (Tc = 25°C)

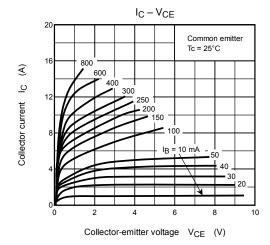
| Characteristics | Symbol | Test Condition | Min | Тур. | Max | Unit |
|--------------------------------------|-------------------------------|---|-----|------|-----|----------|
| Collector cut-off current | I _{CBO} | V _{CB} = 230 V, I _E = 0 | _ | _ | 5.0 | μΑ |
| Emitter cut-off current | I _{EBO} | V _{EB} = 5 V, I _C = 0 | _ | _ | 5.0 | μA |
| Collector-emitter breakdown voltage | V (BR) CEO | I _C = 50 mA, I _B = 0 | 230 | _ | | V |
| DC current gain | h _{FE (1)} (Note) | V _{CE} = 5 V, I _C = 1 A | 55 | _ | 160 | |
| | h _{FE (2)} | V _{CE} = 5 V, I _C = 7 A | 35 | 60 | _ | |
| Collector-emitter saturation voltage | V _{CE (sat)} | I _C = 8 A, I _B = 0.8 A | _ | 0.4 | 3.0 | V |
| Base-emitter voltage | V_{BE} | V _{CE} = 5 V, I _C = 7 A | _ | 1.0 | 1.5 | ٧ |
| Transition frequency | f _T | V _{CE} = 5 V, I _C = 1 A | _ | 30 | _ | MHz |
| Collector output capacitance | C _{ob} | V _{CB} = 10 V, I _E = 0, f = 1 MHz | _ | 200 | _ | pF |

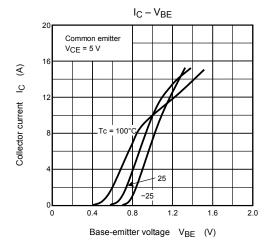
Note: hFE (1) classification R: 55 to 110, O: 80 to 160

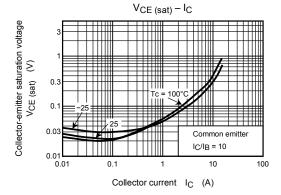
Marking

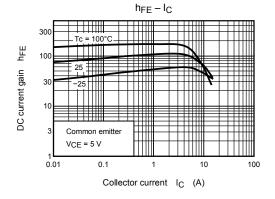


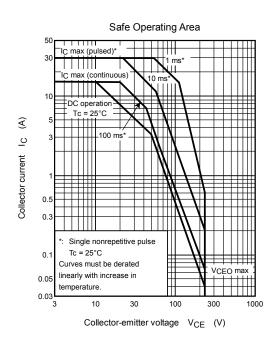
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