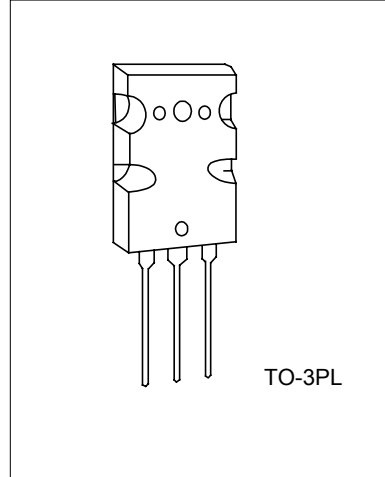


UTC 2SC5200 NPN EPITAXIAL SILICON TRANSISTOR

POWER AMPLIFIER APPLICATIONS

FEATURES

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



*Pb-free plating product number: 2SC5200L

ABSOLUTE MAXIMUM RATINGS (T_C = 25°C)

| PARAMETER | SYMBOL | RATINGS | 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 | 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 (T_C=25°C)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|----------------------|-----------------------------------------------------|-----|------|-----|------|
| Collector-Emitter Breakdown Voltage | V _{(BR)CEO} | I _C = 50mA, I _B = 0 | 230 | | | V |
| 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 |
| Collector Cut-off Current | I _{CBO} | V _{CB} = 230V, I _E = 0 | | | 5.0 | μA |
| Emitter Cut-off Current | I _{EBO} | V _{EB} = 5V, I _C = 0 | | | 5.0 | μA |
| DC Current Gain | h _{FE1} | V _{CE} = 5V, I _C = 1A | 55 | | 160 | |
| | h _{FE2} | V _{CE} = 5V, I _C = 7A | 35 | 60 | | |
| 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 |

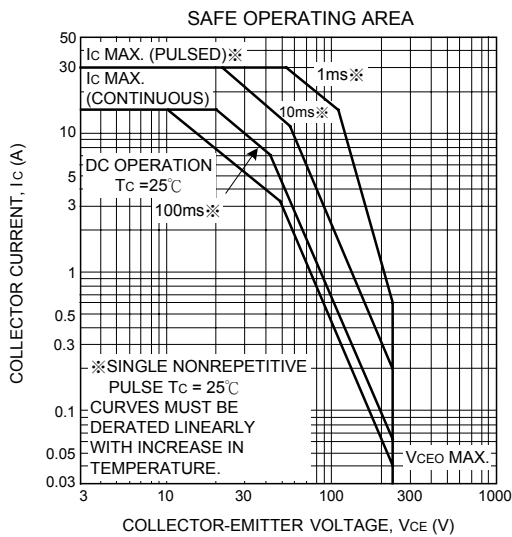
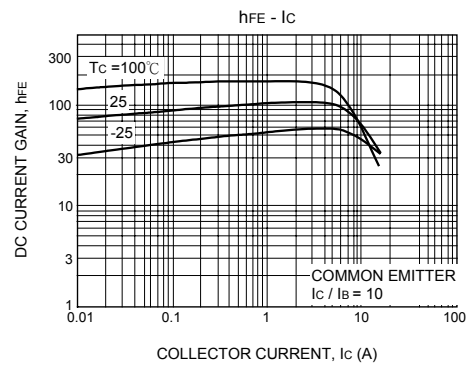
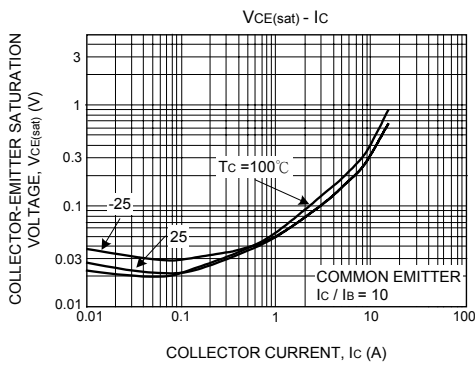
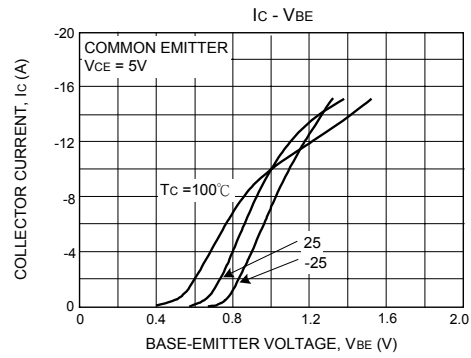
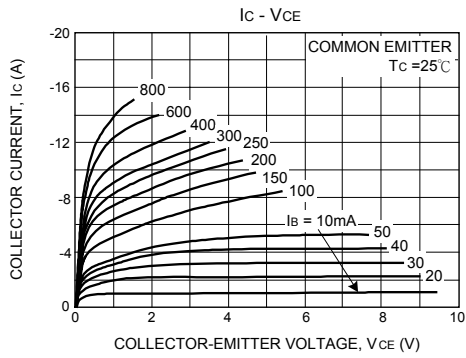
Note: h_{FE} (1) Classification, R : 55 ~ 110, O : 80 ~ 160

CLASSIFICATION OF HFE1

| RANK | R | O |
|-------|----------|----------|
| Range | 55 ~ 110 | 80 ~ 160 |

UTC 2SC5200 NPN EPITAXIAL SILICON TRANSISTOR

TYPICAL CHARACTERISTICS



UTC 2SC5200 NPN EPITAXIAL SILICON TRANSISTOR

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