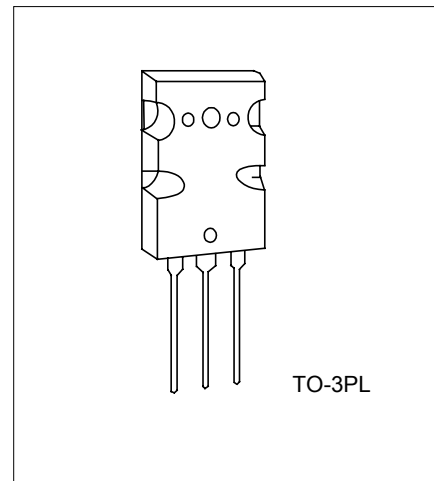


POWER AMPLIFIER APPLICATIONS

FEATURES

- * Complementary to UTC 2SC5200
- * Recommended for 100W High Fidelity Audio Frequency Amplifier Output Stage.



1:BASE 2:COLLECTOR 3:EMITTER
*Pb-free plating product number:2SA1943L

ABSOLUTE MAXIMUM RATINGS

($T_C = 25^\circ\text{C}$)

| 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 ($T_C=25^\circ\text{C}$) | P_C | 150 | W |
| Junction Temperature | T_J | 0 ~ +125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -65 ~ +125 | $^\circ\text{C}$ |

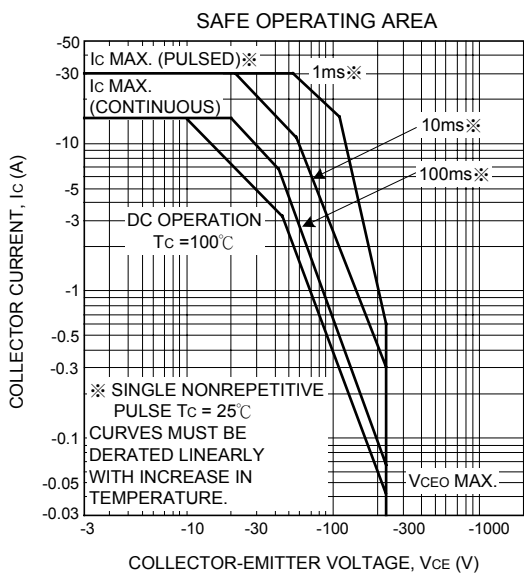
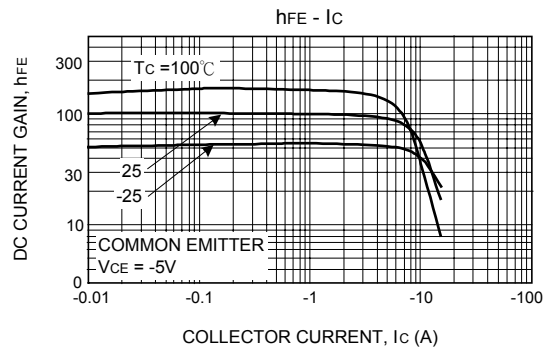
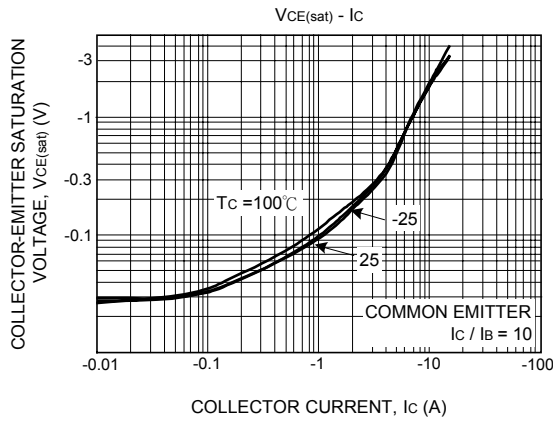
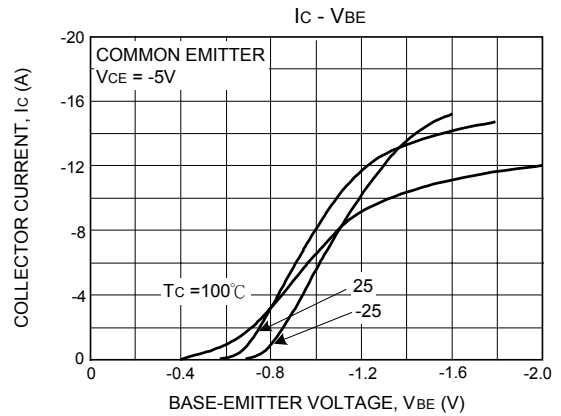
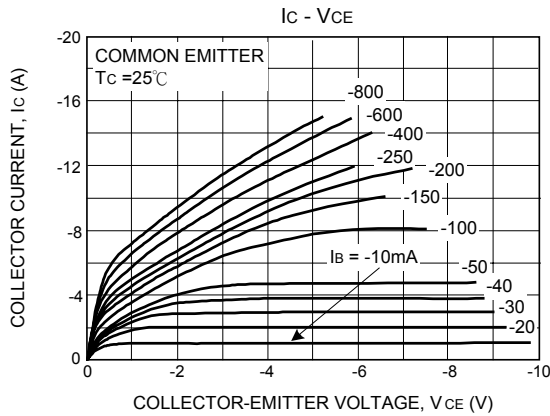
ELECTRICAL CHARACTERISTICS

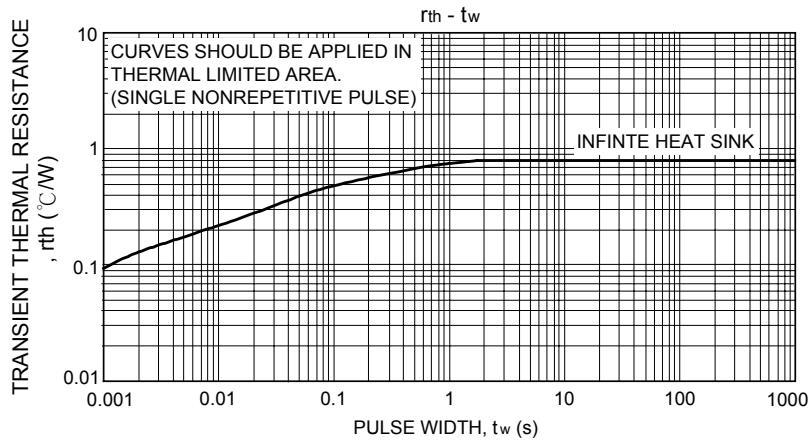
($T_a=25^\circ\text{C}$)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|--------------------|--|------|------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -230\text{V}, I_E=0$ | | | -5.0 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5\text{V}, I_C=0$ | | | -5.0 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -50\text{mA}, I_B=0$ | -230 | | | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE} = -5\text{V}, I_C = -1\text{A}$ | 55 | | 160 | |
| | $h_{FE(2)}$ | $V_{CE} = -5\text{V}, I_C = -7\text{A}$ | 35 | 60 | | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -8\text{A}, I_B = -0.8\text{A}$ | | -1.5 | -3.0 | V |
| Base -Emitter Voltage | V_{BE} | $V_{CE} = -5\text{V}, I_C = -7\text{A}$ | | -1.0 | -1.5 | V |
| Transition Frequency | f_T | $V_{CE} = -5\text{V}, I_C = -1\text{A}$ | | 30 | | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10\text{V}, I_E=0, f=1\text{MHz}$ | | 360 | | pF |

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

TYPICAL CHARACTERISTICS





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