

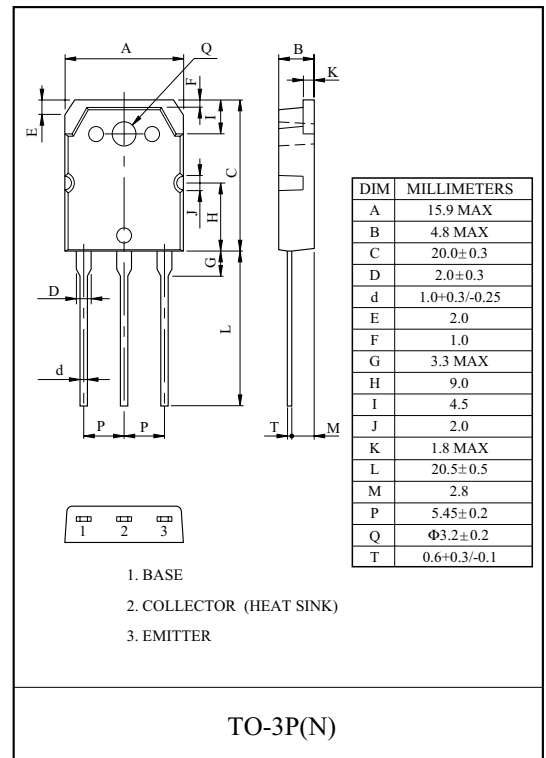
POWER AMPLIFIER APPLICATIONS.

FEATURES

- High Collector Voltage : $V_{CE0}=230V(\text{Min.})$
- Complementary to KTA1962A.
- Recommended for 80W High Fidelity Audio Frequency Amplifier Output Stage.

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

| CHARACTERISTIC | 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 | A |
| Base Current | I_B | 1.5 | A |
| Collector Power Dissipation ($T_c=25^\circ\text{C}$) | P_C | 130 | W |
| Junction Temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | $^\circ\text{C}$ |

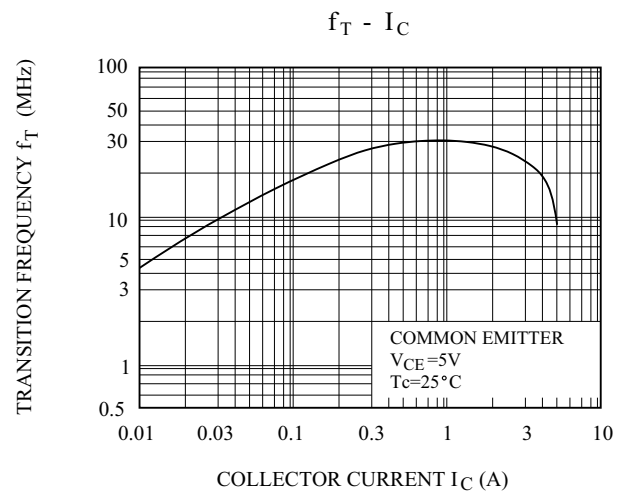
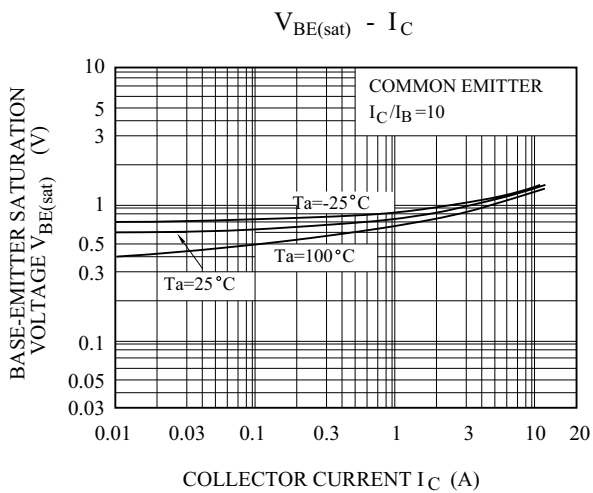
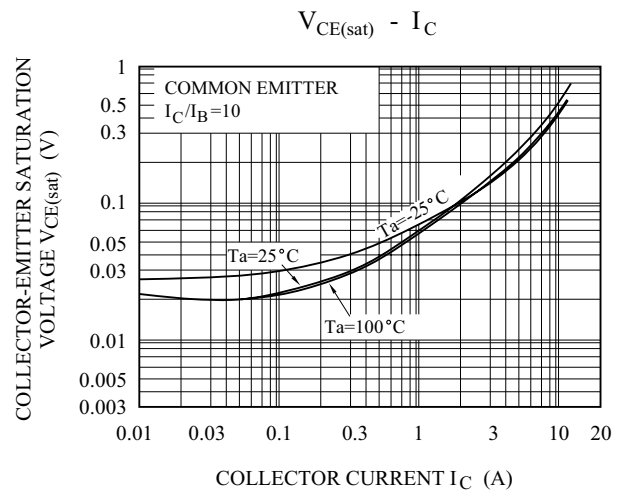
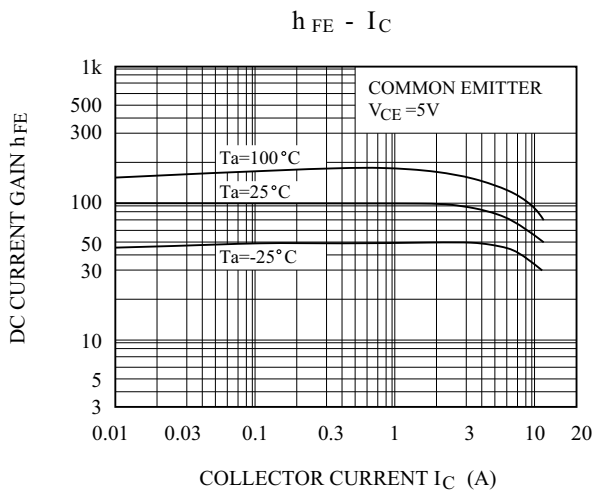
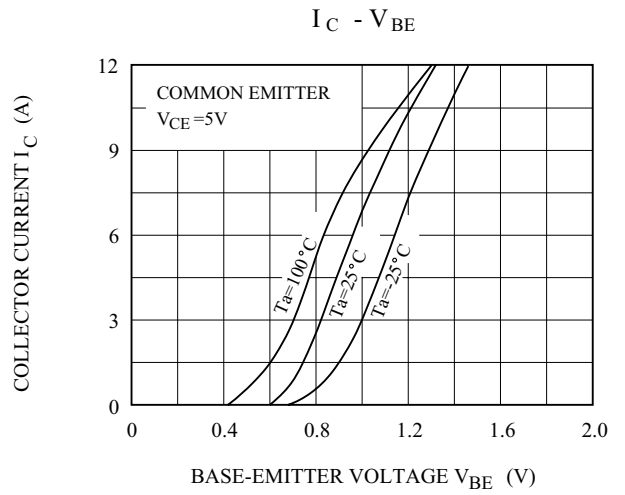
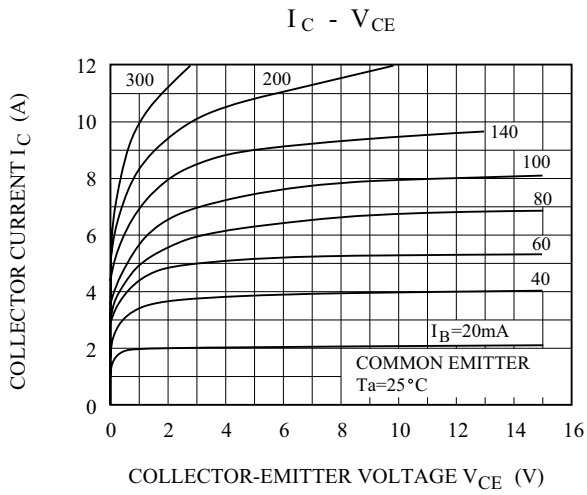


ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

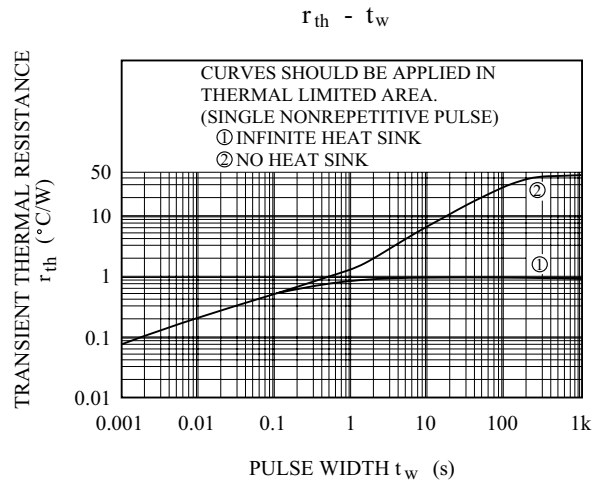
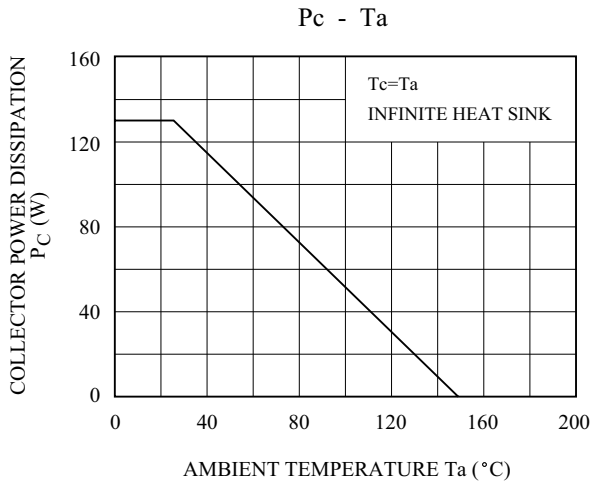
| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|--------------------|------------------------------------|------|------|------|---------------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=230V, I_E=0$ | - | - | 5.0 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 5.0 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=50\text{mA}, I_B=0$ | 230 | - | - | V |
| DC Current Gain | $h_{FE}(1)$ (Note) | $V_{CE}=5V, I_C=1A$ | 55 | - | 160 | |
| | $h_{FE}(2)$ | $V_{CE}=5V, I_C=7A$ | 35 | 60 | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=8A, I_B=0.8A$ | - | 0.4 | 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} | $V_{CB}=10V, I_E=0, f=1\text{MHz}$ | - | 200 | - | pF |

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

KTC5242A



KTC5242A



SAFE OPERATING AREA

