

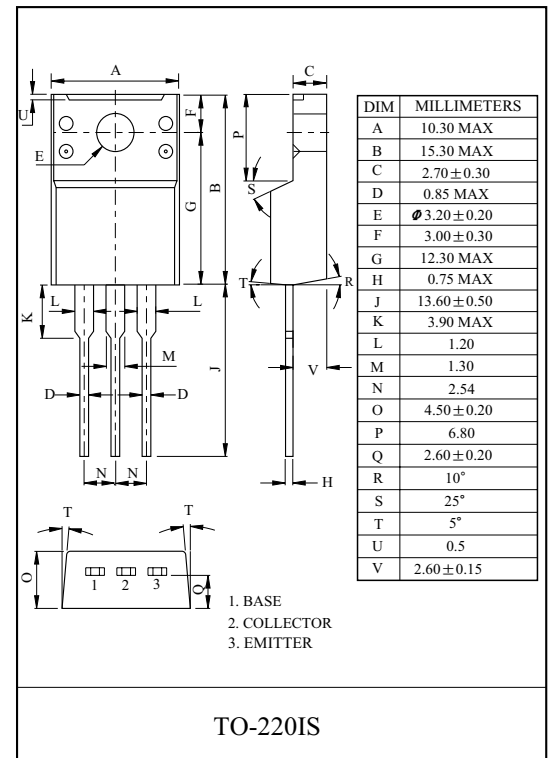
HIGH VOLTAGE APPLICATION.

FEATURES

- High Transition Frequency : $f_T=100\text{MHz(Typ.)}$.
- Complementary to KTC4370/A.

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | | SYMBOL | RATING | UNIT |
|--|----------|-----------|-----------|------|
| Collector-Base Voltage | KTA1659 | V_{CBO} | -160 | V |
| | KTA1659A | | -180 | |
| Collector-Emitter Voltage | KTA1659 | V_{CEO} | -160 | V |
| | KTA1659A | | -180 | |
| Emitter-Base Voltage | | V_{EBO} | -5 | V |
| Collector Current | | I_C | -1.5 | A |
| Base Current | | I_B | -0.15 | A |
| Collector Power Dissipation (Tc=25 °C) | | P_C | 20 | W |
| Junction Temperature | | T_j | 150 | °C |
| Storage Temperature Range | | T_{stg} | -55 ~ 150 | °C |

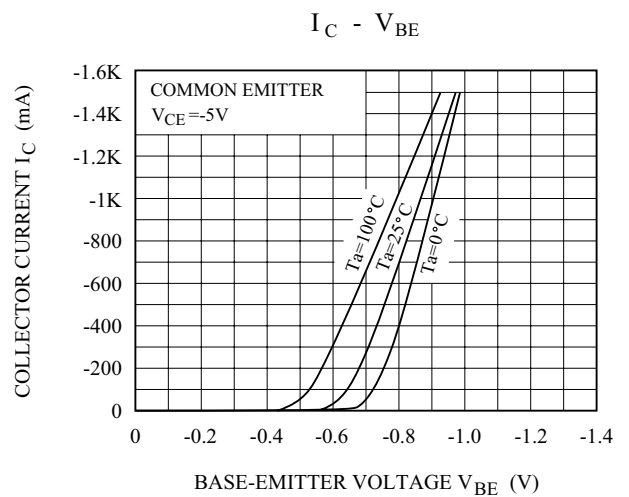
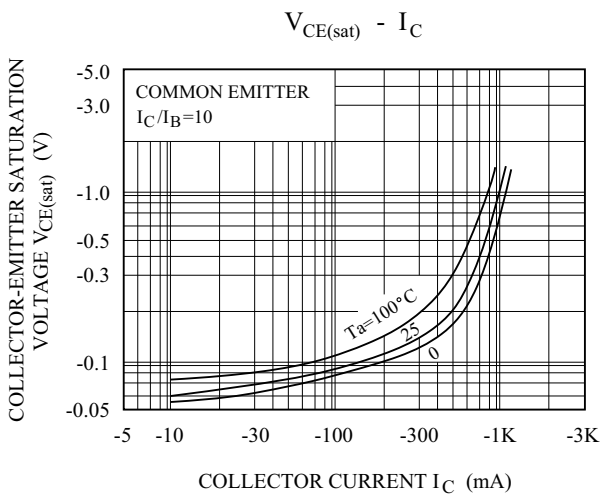
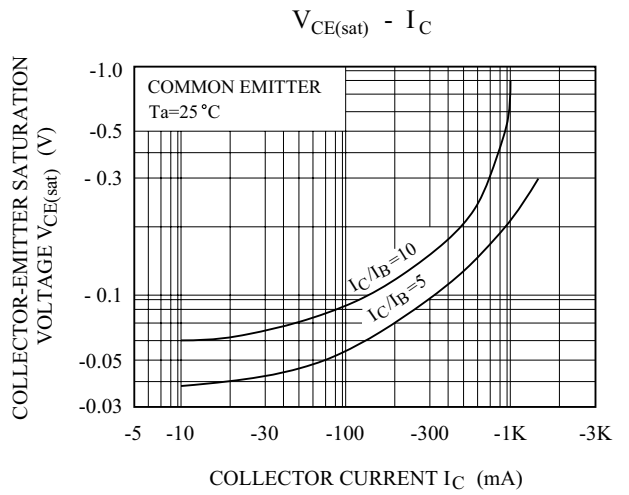
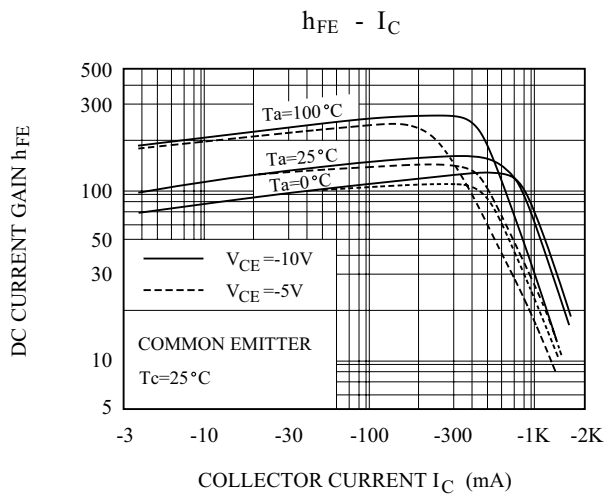
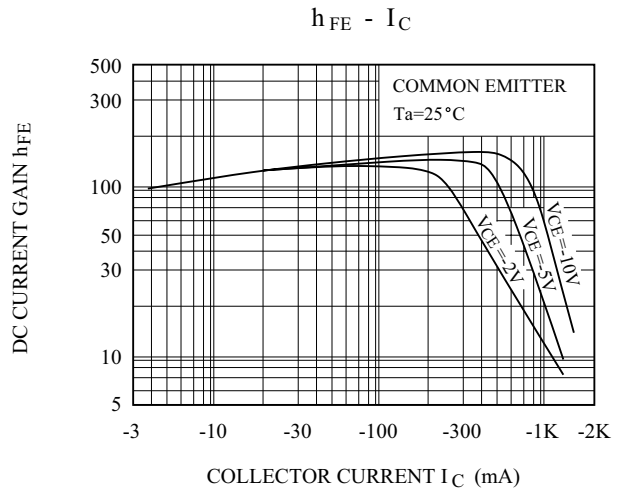
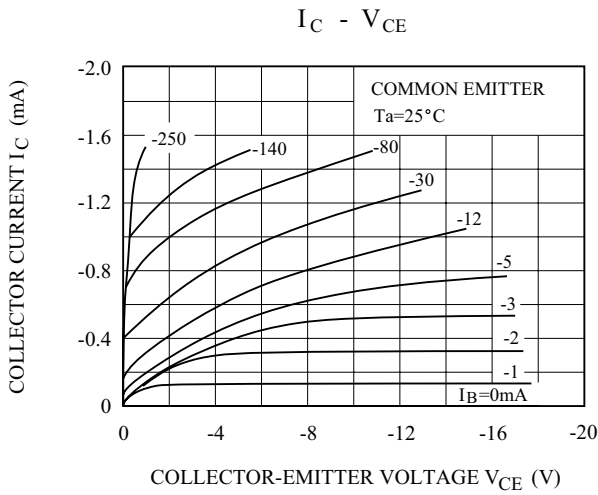


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT | |
|--------------------------------------|-----------------|--|---------------------------|------|------|---------------|---|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=-160\text{V}, I_E=0$ | - | - | -1.0 | μA | |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=-5\text{V}, I_C=0$ | - | - | -1.0 | μA | |
| Collector-Emitter Breakdown Voltage | KTA1659 | $V_{(BR)CEO}$ | $I_C=-10\text{mA}, I_B=0$ | -160 | - | - | V |
| | KTA1659A | | | -180 | - | - | |
| DC Current Gain | h_{FE} (Note) | $V_{CE}=-5\text{V}, I_C=-100\text{mA}$ | 70 | - | 240 | | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-500\text{mA}, I_B=-50\text{mA}$ | - | - | -1.5 | V | |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=-5\text{V}, I_C=-500\text{mA}$ | - | - | -1.0 | V | |
| Transition Frequency | f_T | $V_{CE}=-10\text{V}, I_C=-100\text{mA}$ | - | 100 | - | MHz | |
| Collector Output Capacitance | C_{ob} | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ | - | 30 | - | pF | |

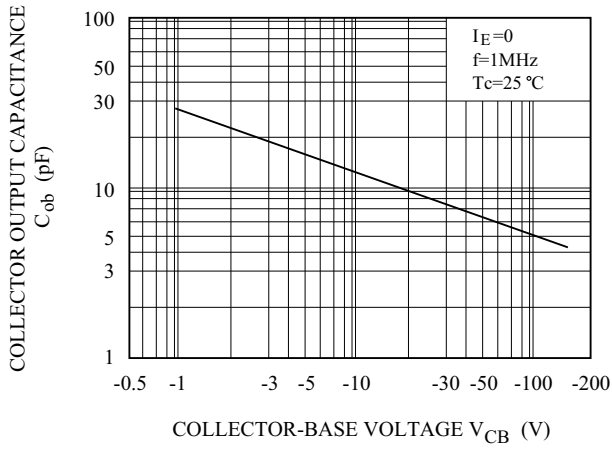
Note : h_{FE} Classification O:70~140, Y:120~240

KTA1659/A

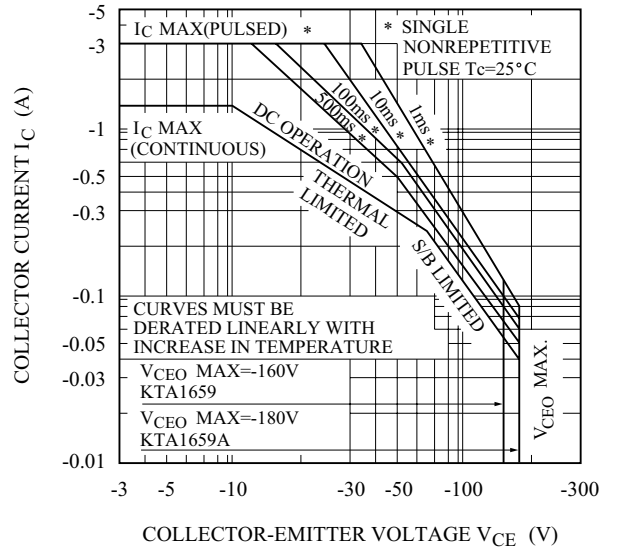


KTA1659/A

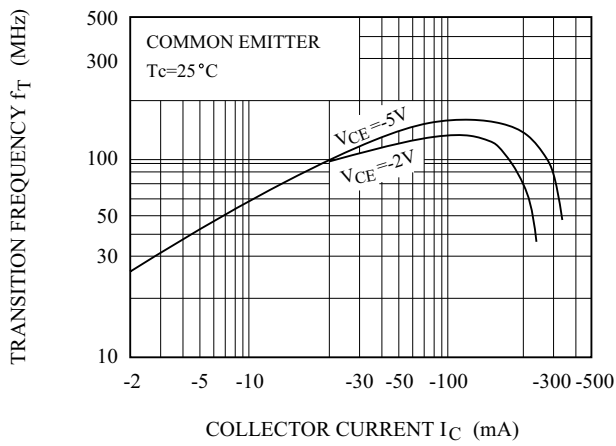
$C_{ob} - V_{CB}$



SAFE OPERATING AREA



$f_T - I_C$



$P_c - T_a$

