

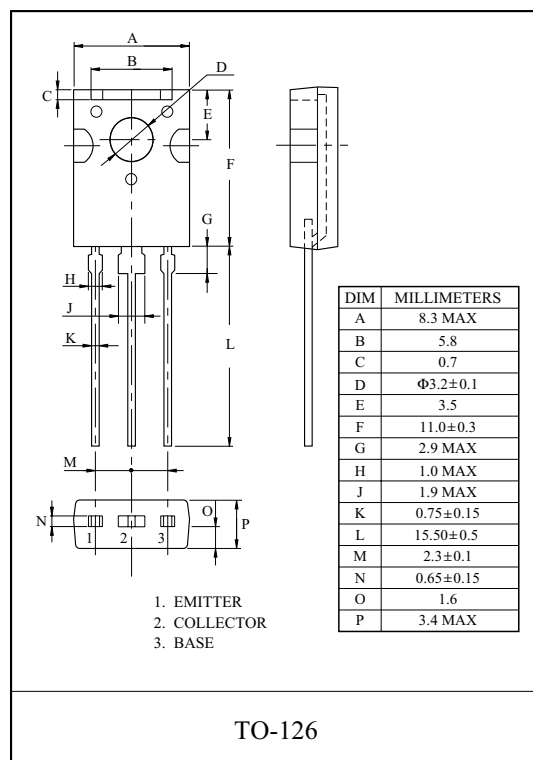
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURE

- High DC Current Gain : $h_{FE}=600 \sim 3600$.

MAXIMUM RATING (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage | V_{CBO} | 50 | V |
| Collector-Emitter Voltage | V_{CEO} | 50 | V |
| Emitter-Base Voltage | V_{EBO} | 5 | V |
| Collector Current | I_C | 150 | mA |
| Base Current | I_B | 30 | mA |
| Collector Power Dissipation | P_C | 1.5 | W |
| Junction Temperature | T_j | 150 | °C |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | °C |



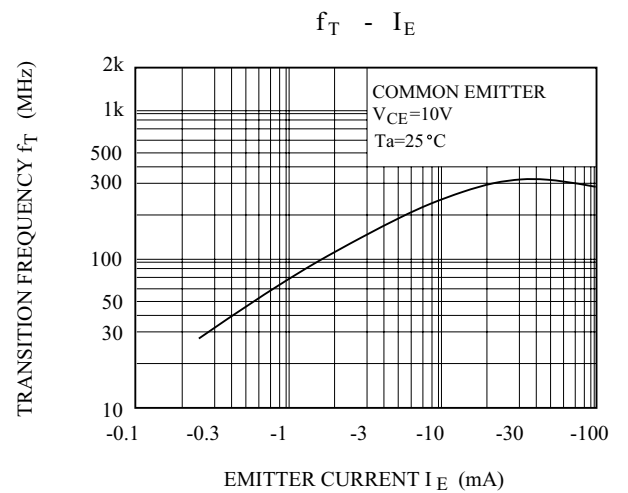
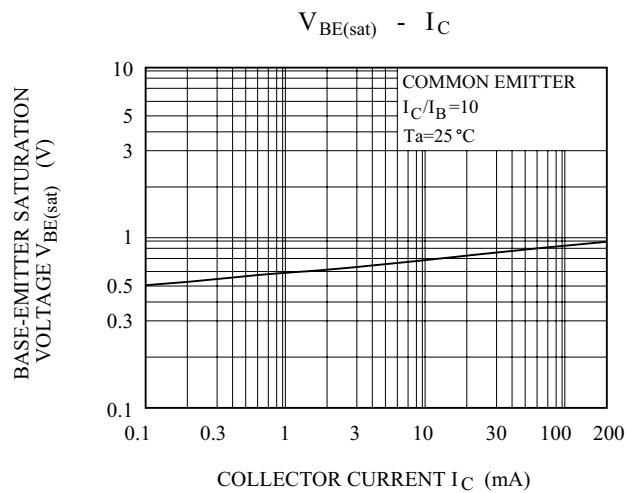
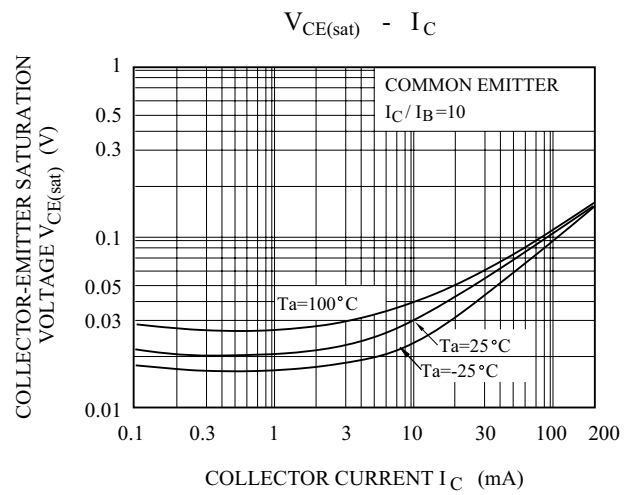
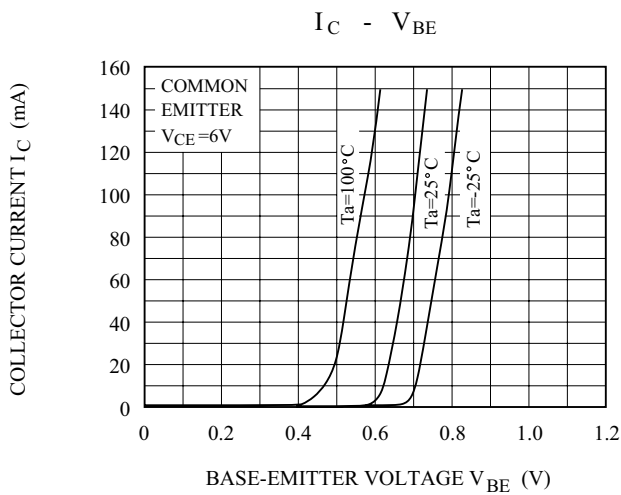
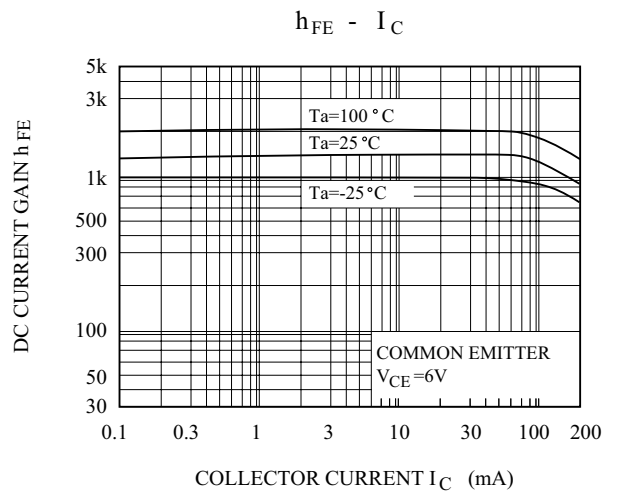
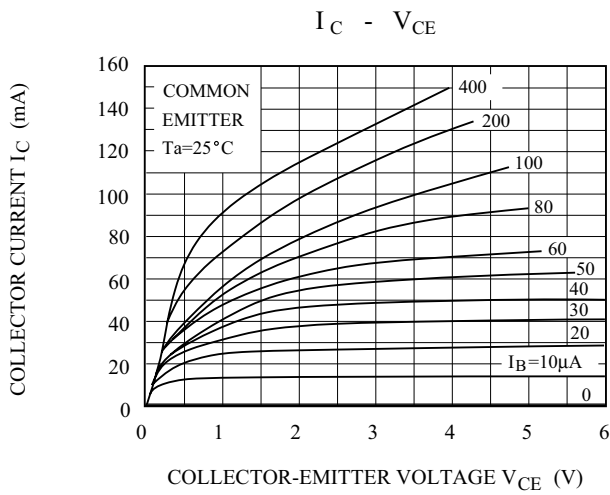
Datasheet.Live

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|---------------------------------------|-----------------------|--|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB}=50V, I_E=0$ | - | - | 0.1 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=5V, I_C=0$ | - | - | 0.1 | μA |
| DC Current Gain | $h_{FE}(\text{Note})$ | $V_{CE}=6V, I_C=2mA$ | 600 | - | 3600 | |
| Collector- Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=100mA, I_B=10mA$ | - | 0.1 | 0.25 | V |
| Transition Frequency | f_T | $V_{CE}=10V, I_C=10mA$ | 100 | 250 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=10V, I_E=0, f=1MHz$ | - | 3.5 | - | pF |
| Noise Figure | NF(1) | $V_{CE}=6V, I_C=0.1mA$ $f=100Hz, R_g=10k\Omega$ | - | 0.5 | - | dB |
| | NF(2) | $V_{CE}=6V, I_C=0.1mA$ $f=1kHz, R_g=10k\Omega$ | - | 0.3 | - | dB |

Note: h_{FE} Classification A:600 ~ 1800, B:1200 ~ 3600

KTC3114



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