

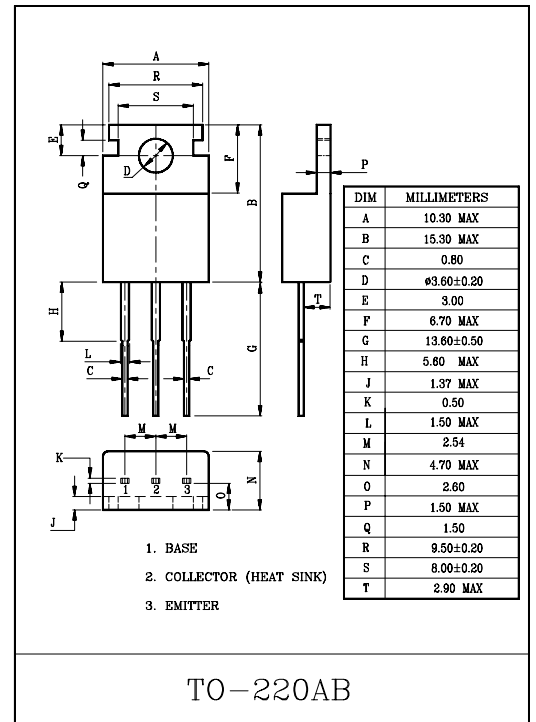
GENERAL PURPOSE APPLICATION.

FEATURES

- Good Linearity of h_{FE} .
- Complementary to KTC3230.

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|---------|------------------|
| Collector-Base Voltage | V_{CBO} | -30 | V |
| Collector-Emitter Voltage | V_{CEO} | -30 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current | I_C | -3 | A |
| Emitter Current | I_E | 3 | A |
| Collector Power Dissipation ($T_c=25^\circ\text{C}$) | P_C | 10 | 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} | $V_{CB}=-20\text{V}, I_E=0$ | - | - | -1.0 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB}=-5\text{V}, I_C=0$ | - | - | -1.0 | μA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C=-10\text{mA}, I_B=0$ | -30 | - | - | V |
| Emitter Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E=-1\text{mA}, I_C=0$ | -5 | - | - | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | 70 | - | 240 | |
| | $h_{FE(2)}$ | $V_{CE}=-2\text{V}, I_C=-2.5\text{A}$ | 25 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-2\text{A}, I_B=-0.2\text{A}$ | - | -0.3 | -0.8 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | - | -0.75 | -1.0 | V |
| Transition Frequency | f_T | $V_{CE}=-2\text{V}, I_C=-0.5\text{A}$ | - | 100 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ | - | 40 | - | pF |

Note : $h_{FE(1)}$ Classification 0:70~140, Y:120~240