

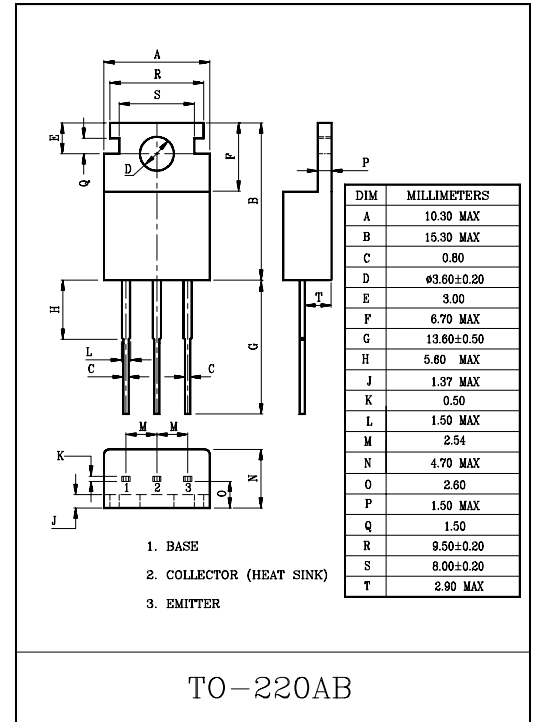
GENERAL PURPOSE APPLICATION.

FEATURES

- High Breakdown Voltage : $V_{CE0} = -100V$.
- Low Collector-Emitter Saturation Voltage : $V_{CE(sat)} = -2.0V(\text{Max.})$
- Complementary to KTC2018.

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

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---|-----------|-----------|------------|
| Collector-Base Voltage | V_{CBO} | -100 | V |
| Collector-Emitter Voltage | V_{CEO} | -100 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current | I_C | -5 | A |
| Emitter Current | I_E | 5 | A |
| Base Current | I_B | -0.5 | A |
| Collector Power Dissipation ($T_c = 25^\circ C$) | P_C | 40 | W |
| Junction Temperature | T_j | 150 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | $^\circ C$ |



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

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|--------------------------------------|-----------------------|------------------------------------|------|------|------|---------|
| Collector Cut-off Current | I_{CBO} | $V_{CB} = -100V, I_E = 0$ | - | - | -100 | μA |
| Emitter Cut-off Current | I_{EBO} | $V_{EB} = -5V, I_C = 0$ | - | - | -1.0 | mA |
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = -50mA, I_B = 0$ | -100 | - | - | V |
| Emitter-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = -10mA, I_C = 0$ | -5.0 | - | - | V |
| DC Current Gain | $h_{FE(1)}$ (Note) | $V_{CE} = -5V, I_C = -1A$ | 70 | - | 240 | |
| | $h_{FE(2)}$ | $V_{CE} = -5V, I_C = -4A$ | 20 | - | - | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = -4A, I_B = -0.4A$ | - | - | -2.0 | V |
| Base-Emitter Voltage | V_{BE} | $V_{CE} = -5V, I_C = -4A$ | - | - | -1.5 | V |
| Transition Frequency | f_T | $V_{CE} = -5V, I_C = -1A$ | - | 30 | - | MHz |
| Collector Output Capacitance | C_{ob} | $V_{CB} = -10V, I_E = 0, f = 1MHz$ | - | 90 | - | pF |

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

