

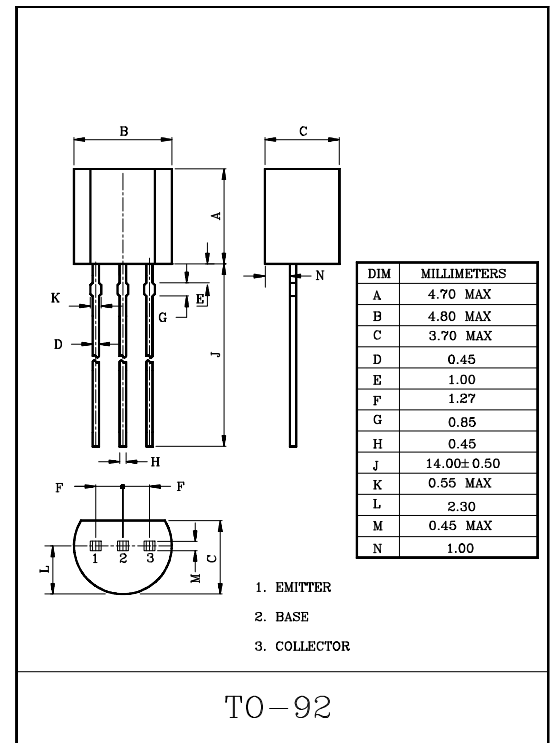
HIGH CURRENT APPLICATION.

### FEATURE

- Complementary to KTC8550.

### MAXIMUM RATINGS (Ta=25°C)

| CHARACTERISTIC              | SYMBOL    | RATING  | UNIT |
|-----------------------------|-----------|---------|------|
| Collector-Base Voltage      | $V_{CBO}$ | 35      | V    |
| Collector-Emitter Voltage   | $V_{CEO}$ | 30      | V    |
| Emitter-Base Voltage        | $V_{EBO}$ | 5       | V    |
| Collector Current           | $I_C$     | 800     | mA   |
| Emitter Current             | $I_E$     | -800    | mA   |
| Collector Power Dissipation | $P_C$     | 625     | mW   |
| 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            | $I_{CBO}$             | $V_{CB}=15V, I_E=0$         | -    | -    | 50   | nA   |
| Collector-Base Breakdown Voltage     | $V_{(BR)CBO}$         | $I_C=0.5mA, I_E=0$          | 35   | -    | -    | V    |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$         | $I_C=1mA, I_B=0$            | 30   | -    | -    | V    |
| DC Current Gain                      | $h_{FE(1)}$<br>(Note) | $V_{CE}=1V, I_C=50mA$       | 100  | -    | 300  |      |
|                                      | $h_{FE(2)}$           | $V_{CE}=1V, I_C=350mA$      | 60   | -    | -    |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$         | $I_C=500mA, I_B=20mA$       | -    | -    | 0.5  | V    |
| Base-Emitter Voltage                 | $V_{BE}$              | $V_{CE}=1V, I_C=500mA$      | -    | -    | 1.2  | V    |
| Transition Frequency                 | $f_T$                 | $V_{CE}=5V, I_C=10mA$       | -    | 120  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$              | $V_{CB}=10V, f=1MHz, I_E=0$ | -    | 13   | -    | pF   |

Note :  $h_{FE(1)}$  Classification    C : 100~200,    D : 150~300

# KTC8050

