

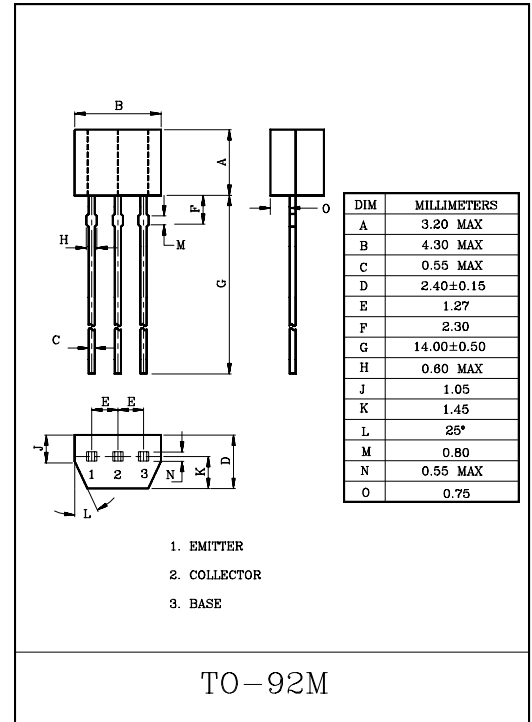
HIGH CURRENT APPLICATION.

### FEATURES

- High  $h_{FE}$  :  $h_{FE}=100\sim 320$ .
- Complementary to KTC3204.

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

| 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 | $P_C$     | 400     | mW               |
| 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            | $I_{CBO}$             | $V_{CB}=-30\text{V}, I_E=0$                | -    | -    | -100 | nA   |
| Emitter Cut-off Current              | $I_{EBO}$             | $V_{EB}=-5\text{V}, I_C=0$                 | -    | -    | -100 | nA   |
| Collector-Emitter Breakdown Voltage  | $V_{(BR)CEO}$         | $I_C=-10\text{mA}, I_B=0$                  | -30  | -    | -    | V    |
| DC Current Gain                      | $h_{FE(1)}$<br>(Note) | $V_{CE}=-1\text{V}, I_C=-100\text{mA}$     | 100  | -    | 320  |      |
|                                      | $h_{FE(2)}$           | $V_{CE}=-1\text{V}, I_C=-700\text{mA}$     | 35   | -    | -    |      |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$         | $I_C=-500\text{mA}, I_B=-20\text{mA}$      | -    | -    | -0.7 | V    |
| Base-Emitter Voltage                 | $V_{BE}$              | $V_{CE}=-1\text{V}, I_C=-10\text{mA}$      | -0.5 | -    | -0.8 | V    |
| Transition Frequency                 | $f_T$                 | $V_{CE}=-5\text{V}, I_C=-10\text{mA}$      | -    | 120  | -    | MHz  |
| Collector Output Capacitance         | $C_{ob}$              | $V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$ | -    | 19   | -    | pF   |

Note :  $h_{FE(1)}$  Classification      0:100~200,      Y:160~320