

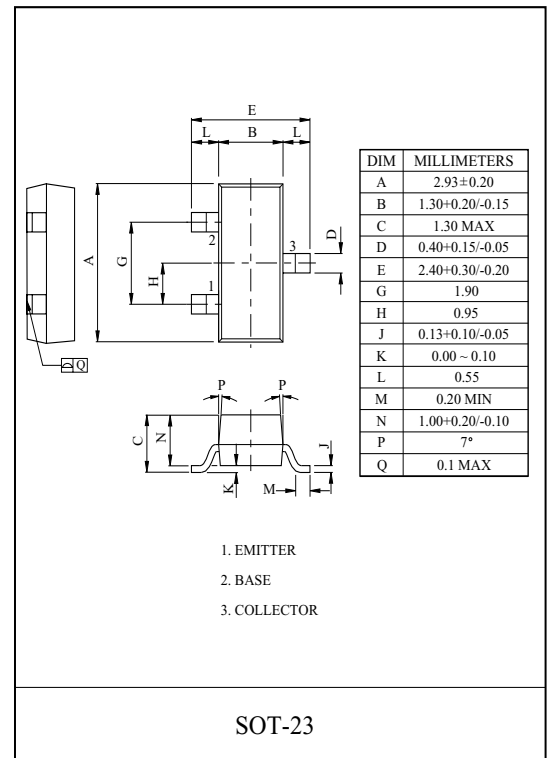
GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

### FEATURES

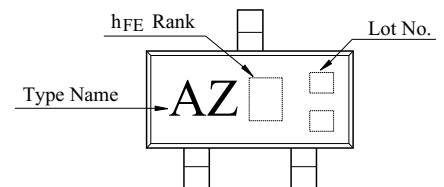
- Excellent  $h_{FE}$  Linearity  
:  $h_{FE(2)}=25(\text{Min.})$  at  $V_{CE}=-6V, I_C=-400\text{mA}$ .
- Complementary to KTC3876S.

### MAXIMUM RATING (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           | $I_C$     | -500    | mA   |
| Base Current                | $I_B$     | -50     | mA   |
| Collector Power Dissipation | $P_C$     | 150     | mW   |
| Junction Temperature        | $T_j$     | 150     |      |
| Storage Temperature Range   | $T_{stg}$ | -55 150 |      |



### Marking



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

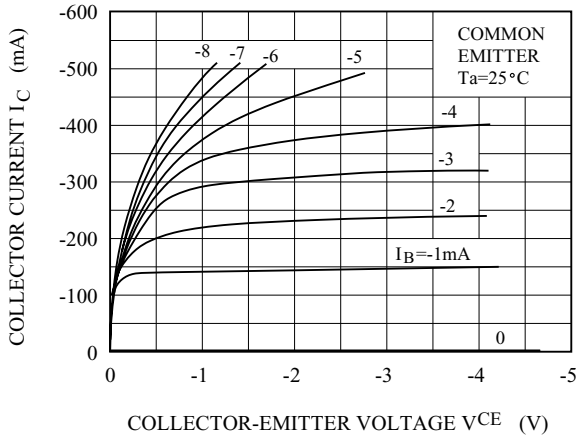
| CHARACTERISTIC                       | SYMBOL        | TEST CONDITION                        | MIN. | TYP. | MAX.  | UNIT          |
|--------------------------------------|---------------|---------------------------------------|------|------|-------|---------------|
| Collector Cut-off Current            | $I_{CBO}$     | $V_{CB}=-35V, I_E=0$                  | -    | -    | -0.1  | $\mu\text{A}$ |
| Emitter Cut-off Current              | $I_{EBO}$     | $V_{EB}=-5V, I_C=0$                   | -    | -    | -0.1  | $\mu\text{A}$ |
| DC Current Gain (Note)               | $h_{FE(1)}$   | $V_{CE}=-1V, I_C=-100\text{mA}$       | 70   | -    | 400   |               |
|                                      | $h_{FE(2)}$   | $V_{CE}=-6V, I_C=-400\text{mA}$       | 25   | -    | -     |               |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=-100\text{mA}, I_B=-10\text{mA}$ | -    | -0.1 | -0.25 | V             |
| Base-Emitter Voltage                 | $V_{BE}$      | $V_{CE}=-1V, I_C=-100\text{mA}$       | -    | -0.8 | -1.0  | V             |
| Transition Frequency                 | $f_T$         | $V_{CE}=-6V, I_C=-20\text{mA}$        | -    | 200  | -     | MHz           |
| Collector Output Capacitance         | $C_{ob}$      | $V_{CB}=-6V, I_E=0, f=1\text{MHz}$    | -    | 13   | -     | pF            |

(Note) :  $h_{FE(1)}$  Classification O:70 140 Y:120 240 GR:200 400

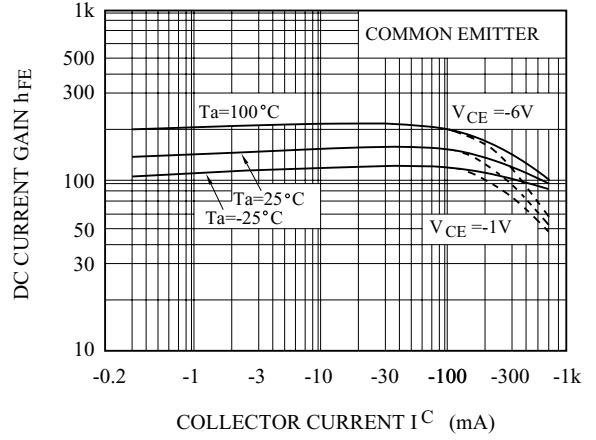
$h_{FE(2)}$  Classification O:25Min. Y:40Min.

# KTA1505S

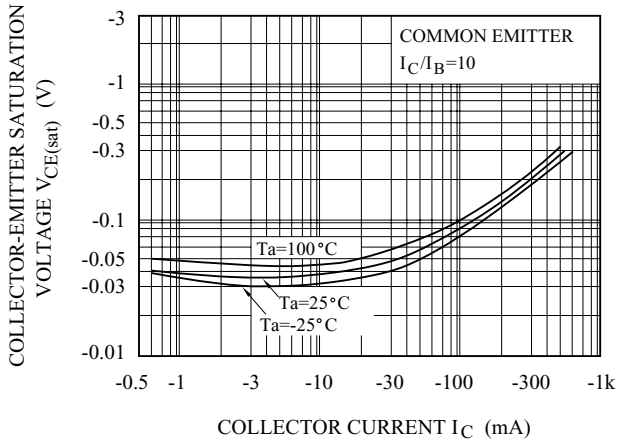
$I_C - V_{CE}$  (LOW VOLTAGE REGION)



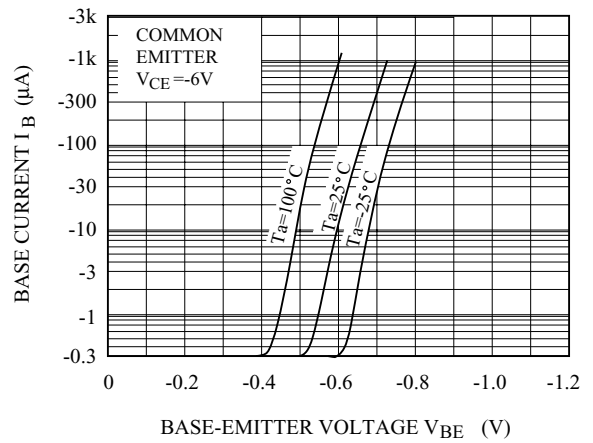
$h_{FE} - I_C$



$V_{CE(sat)} - I_C$



$I_B - V_{BE}$



$P_C - T_a$

