

GENERAL PURPOSE APPLICATION.  
SWITCHING APPLICATION.

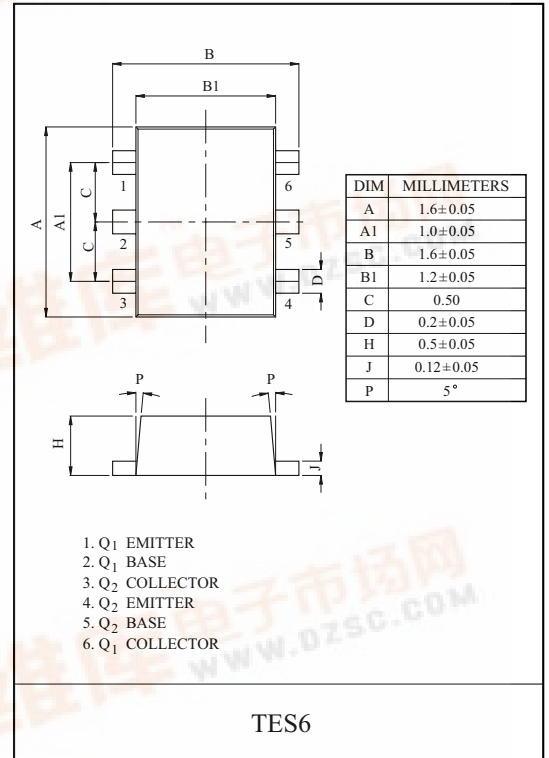
**FEATURES**

- A super-minimold package houses 2 transistor.
- Excellent temperature response between these 2 transistor.
- High pairing property in  $h_{FE}$ .
- The following characteristics are common for  $Q_1, Q_2$ .

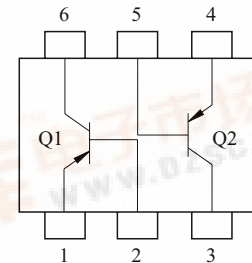
**MAXIMUM RATING (Ta=25°C)**

| CHARACTERISTIC              | SYMBOL    | RATING    | UNIT |
|-----------------------------|-----------|-----------|------|
| Collector-Base Voltage      | $V_{CBO}$ | -50       | V    |
| Collector-Emitter Voltage   | $V_{CEO}$ | -50       | V    |
| Emitter-Base Voltage        | $V_{EBO}$ | -5        | V    |
| Collector Current           | $I_C$     | -150      | mA   |
| Base Current                | $I_B$     | -30       | mA   |
| Collector Power Dissipation | $P_C^*$   | 200       | mW   |
| Junction Temperature        | $T_j$     | 150       | °C   |
| Storage Temperature Range   | $T_{stg}$ | -55 ~ 150 | °C   |

\* Total Rating



**EQUIVALENT CIRCUIT (TOP VIEW)**

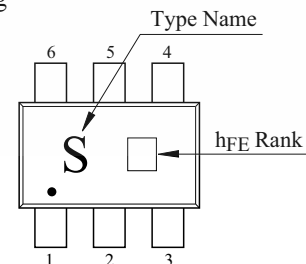


**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

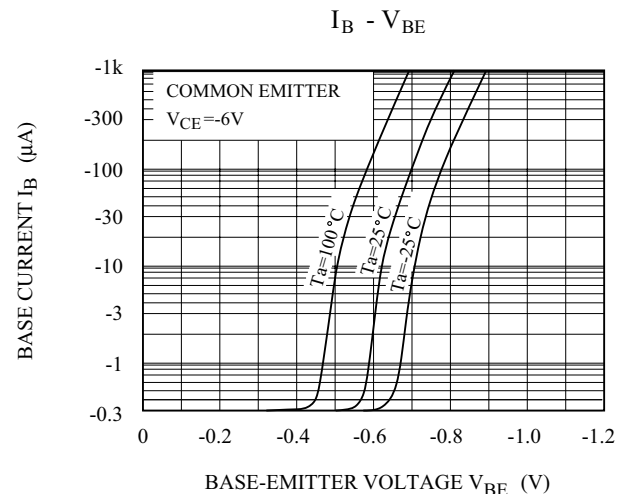
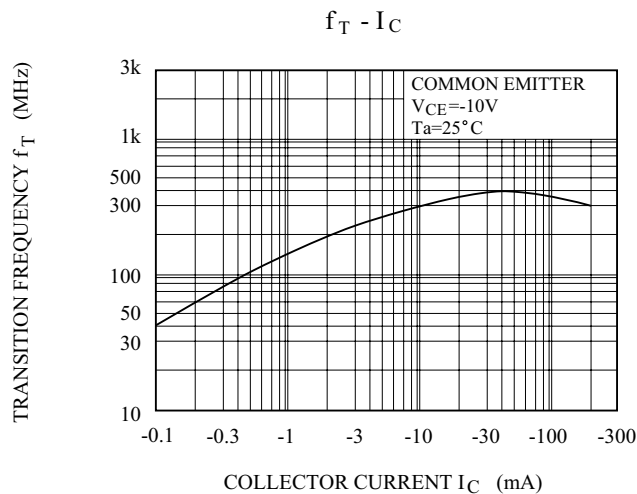
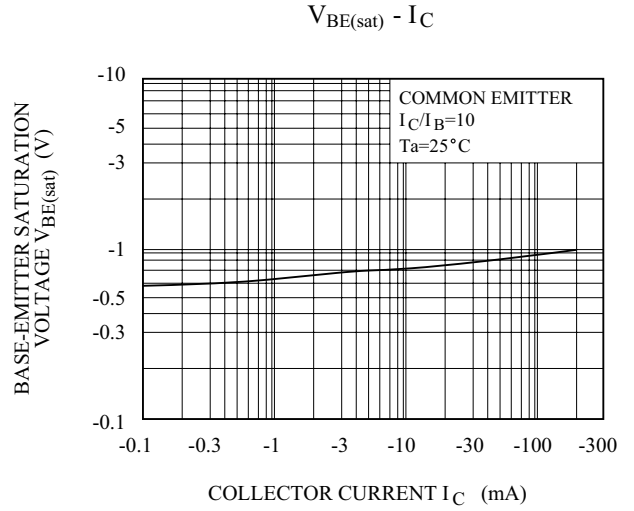
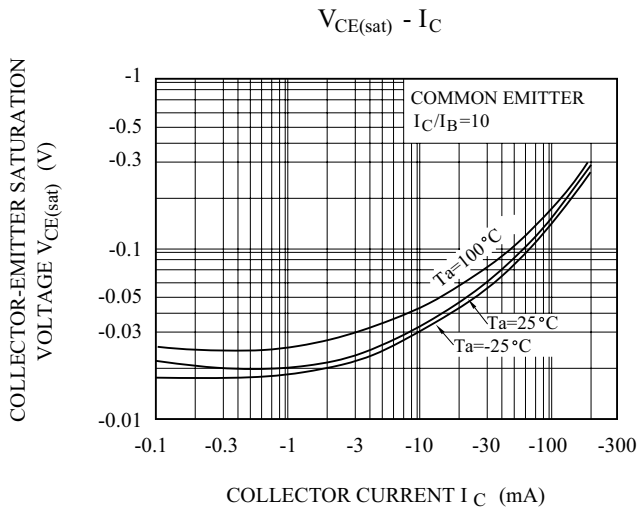
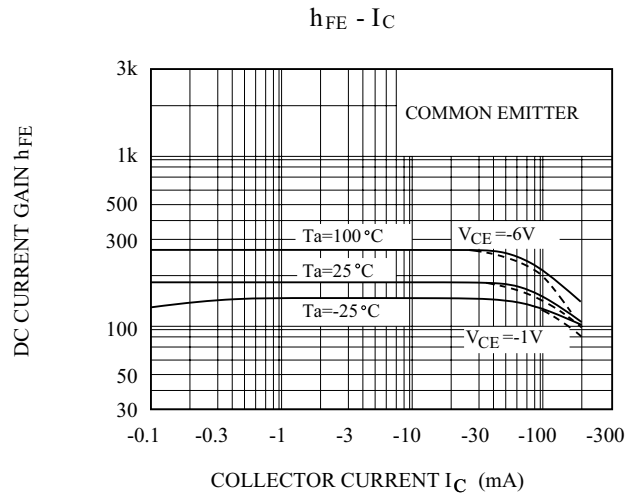
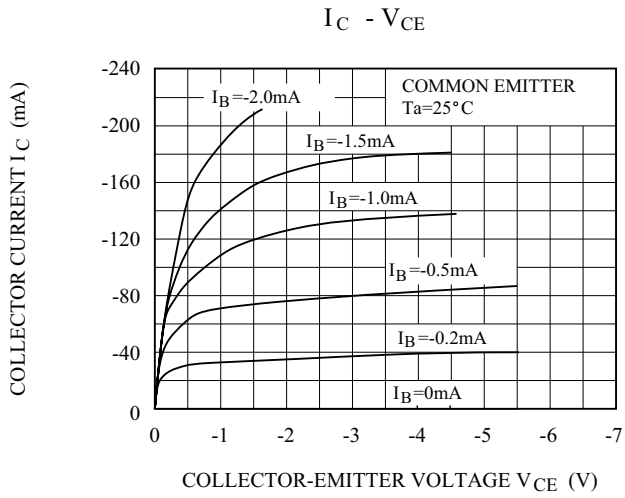
| CHARACTERISTIC                       | SYMBOL          | TEST CONDITION                                  | MIN. | TYP. | MAX.  | UNIT.   |
|--------------------------------------|-----------------|---|------|------|-------|---------|
| Collector Cut-off Current            | $I_{CBO}$       | $V_{CB}=-50V, I_E=0$                            | -    | -    | -0.1  | $\mu A$ |
| Emitter Cut-off Current              | $I_{EBO}$       | $V_{EB}=-5V, I_C=0$                             | -    | -    | -0.1  | $\mu A$ |
| DC Current Gain                      | $h_{FE}$ (Note) | $V_{CE}=-6V, I_C=-2mA$                          | 120  | -    | 400   |         |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$   | $I_C=-100mA, I_B=-10mA$                         | -    | -0.1 | -0.30 | V       |
| Transition Frequency                 | $f_T$           | $V_{CE}=-10V, I_C=-1mA$                         | 80   | -    | -     | MHz     |
| Collector Output Capacitance         | $C_{ob}$        | $V_{CB}=-10V, I_E=0, f=1MHz$                    | -    | 4    | 7     | pF      |
| Noise Figure                         | NF              | $V_{CE}=-6V, I_C=-0.1mA, f=1kHz, R_g=10k\Omega$ | -    | 1.0  | 10    | dB      |

Note :  $h_{FE}$  Classification Y(4):120 ~ 240, GR(6):200 ~ 400

**Marking**



# KTA701E



# KTA701E

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